

DEPARTMENT OF ENVIRONMENTAL CONSERVATION



18 AAC 72

Wastewater Disposal

As amended through July 11, 2002

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Governor**

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IMPORTANT NOTE TO READER

The regulations in this booklet have been prepared by the Department of Environmental Conservation. They do not constitute an official version of these regulations, nor do they necessarily reflect current law. Any amendments made after the date of this booklet would appear in the published version of the Alaska Administrative Code. If any discrepancy is found between this booklet and the Alaska Administrative Code, the Code should be considered the final authority, unless the discrepancy is the result of a manifest error in the Code.

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Chapter 72. Wastewater Treatment and Disposal

Article

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Editor's Note: The regulations in 18 AAC 72.005 – 18 AAC 72.280 and 18 AAC 72.400 – 18 AAC 72.440, effective April 1, 1999 and distributed in Register 149, constitute a comprehensive reorganization and revision of material formerly set out in 18 AAC 72.010 – 18 AAC 72.285. The regulations at 18 AAC 72.005 – 18 AAC 72.280 and 18 AAC 72.400 – 18 AAC 72.440 replace former 18 AAC 72.010 – 18 AAC 72.285, which were repealed simultaneously with the adoption of these regulations. The history line at the end of each section does not reflect the history of the replaced provisions before April 1, 1999. Some section numbers in this revision were used for previous regulations, but current sections are not necessarily related to previous sections with the same section number. Earlier versions of 18 AAC 72.005 – 18 AAC 72.280 may be reviewed at the Office of the Lieutenant Governor, and may be found at the following registers: Register 47, 8/10/73; Register 61, 2/3/77; Register 65, 3/4/78; Register 69, 2/2/79; Register 84, 12/30/83; Register 93, 3/30/85; Register 102, 6/18/87; Register 114, 6/30/90; Register 125, 2/19/93; Register 132, 11/10/94; Register 142, 4/18/97.

Additionally, the regulations in 18 AAC 72, effective June 30, 1990 and distributed in Register 114, constituted a comprehensive reorganization and revision of the material in this chapter. The regulations effective on that date replaced former 18 AAC 72, which was repealed simultaneously with the adoption of those regulations. The history lines at the end of 18 AAC 72.299 – 18 AAC 72.385 and 18 AAC 72.500 – 18 AAC 72.990 do not reflect the history of replaced provisions, if any, before June 30, 1990. Some section numbers in the revision of June 30, 1990 may have been used for regulations existing before that date, but current sections are not necessarily related to previous sections with the same section number. Versions of 18 AAC 72 that preceded the June 30, 1990 comprehensive revision and reorganization may be reviewed at the Office of the Lieutenant Governor, and may be found at the following registers: Register 47, 8/10/73; Register 61, 2/3/77; Register 65, 3/4/78; Register 69, 2/2/79; Register 84, 12/30/83; Register 93, 3/30/85; Register 102, 6/18/87.

Article 1. Domestic Wastewater Treatment And Disposal.

Section

- 05. Purpose and applicability of 18 AAC 72.005 - 18 AAC 72.440
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18 AAC 72.005. Purpose and applicability of 18 AAC 72.005 - 18 AAC 72.440. (a) The purpose of 18 AAC 72.005 - 18 AAC 72.440 is to protect public health, public and private water systems, and the environment from diseases transmitted by domestic wastewater by establishing minimum treatment, construction, operation, and maintenance standards for domestic wastewater treatment works and disposal systems.

(b) The minimum treatment standards established in 18 AAC 72.005 - 18 AAC 72.070 apply to each domestic wastewater collection, treatment, and disposal system installed in the state, including a system that is exempt from plan review requirements under 18 AAC 72.035(d) or 18 AAC 72.200(b).

(c) In addition, the provisions of 18 AAC 72.400 - 18 AAC 72.440 apply to

- (1) persons seeking certification to install or modify conventional onsite systems;
- (2) homeowners seeking approval to install or modify their own conventional onsite systems;
- (3) certified installers of conventional onsite systems; and
- (4) homeowners approved by the department to install their own conventional onsite system. (Eff. 4/1/99, Register 149)

Authority: AS 44.46.020 AS 46.03.100 AS 46.03.720
AS 46.03.020

18 AAC 72.007. Technical review committee. The department will, in its discretion, consult with a technical review committee that can include private engineers, communities, the

University of Alaska, the United States Public Health Service, and the Alaska Science and Technology Foundation if reviewing innovative technology, novel applications of an existing technology, or a pilot project or other limited trial of a proposed technology or application for the treatment and disposal of domestic wastewater. The purpose of the consultation is to obtain recommendations regarding provisional approval for use of those systems, including recommendations for stipulations, modifications, or other restrictions on the use or installation. (Eff. 4/1/99, Register 149)

Authority:	AS 44.46.020	AS 46.03.050	AS 46.03.100
	AS 46.03.020	AS 46.03.080	AS 46.03.720

18 AAC 72.010. Permit and plan approval requirements. (a) A person who disposes of domestic wastewater into or onto land, surface water, or groundwater must have a permit from the department, if the department requires a permit under 18 AAC 72.215, and a plan approved by the department if the department requires a person to obtain approval under 18 AAC 72.200. The permit or approval must be obtained before beginning construction of a domestic wastewater treatment and disposal system.

(b) Before submitting a permit application or plan for review and approval under this chapter, the applicant may request a preapplication conference to discuss the conceptual plan and to resolve any issues with the department. The department will hold the conference within 15 days after the date of a request, or later at the applicant's request. The conference will be attended by the department staff expected to perform the review. Agreements reached at the conference will be recorded in writing and sent to the applicant and other participants within five days after the conference unless another date is agreed upon by the applicant and the department.

(c) Within 90 days after completing the installation or modification of an onsite system, a person described in 18 AAC 72.015(b)-(d) shall submit, in accordance with (d) of this section, a completed documentation of construction form provided by the department; and

(1) for a person described in 18 AAC 72.015(b), record drawings of the installation;

(2) for a person certified under 18 AAC 72.400 - 18 AAC 72.440,

(A) the signature of the certified installer and, if applicable, of the employer-contractor;

(B) the certified installer's certification number; and

(C) photographs that document the various stages of installation or modification, as set out in the *Installer's Manual for Conventional Onsite Domestic Wastewater Treatment and Disposal Systems*, adopted by reference in 18 AAC 72.070(a)(1); or

(3) for a homeowner approved under 18 AAC 72.410, photographs that document the various stages of installation or modification, as set out in the *Installer's Manual for*

Conventional Onsite Domestic Wastewater Treatment and Disposal Systems, adopted by reference in 18 AAC 72.070(a)(1).

(d) A person shall submit permit applications and plans required by this section to the department's office that is nearest the worksite. (Eff.4/1/99, Register 149)

Authority:	AS 44.46.020	AS 46.03.050	AS 46.03.100
	AS 44.46.025	AS 46.03.080	AS 46.03.720
	AS 46.03.020		

Editor's note: For purposes of submitting permit applications and plans as required under 18 AAC 72.010(d), department offices are located in Anchorage, Fairbanks, Juneau, Ketchikan, Soldotna, and Wasilla.

18 AAC 72.015. Restrictions; installation or modification of certain systems. (a) A person may not use a cesspool for domestic wastewater treatment or disposal.

(b) Except as provided in (c) and (d) of this section, a person may not install or modify an onsite system unless that person is

- (1) a registered engineer;
- (2) supervised by a registered engineer; or
- (3) a person whose work is inspected by a registered engineer.

(c) A person certified under 18 AAC 72.400 - 18 AAC 72.440 may install or modify a conventional onsite system that serves a single-family home, duplex, or a small commercial facility.

(d) A homeowner may seek approval under 18 AAC 72.410 to install or modify a conventional onsite system that serves the homeowner's owner-occupied single-family home or owner-occupied duplex. (Eff. 4/1/99, Register 149)

Authority:	AS 44.46.020	AS 46.03.070	AS 46.03.100
	AS 46.03.020	AS 46.03.080	AS 46.03.720
	AS 46.03.050		

18 AAC 72.020. Separation distances. (a) A person who builds or installs a sewer, private sewer line, onsite system, or domestic wastewater treatment works shall comply with the applicable minimum separation distances set out

(1) in 18 AAC 80.020 for a public water system, unless the department has approved a lesser separation distance under that section; or

- (2) in (c) of this section for a private water system.

(b) The minimum separation distance between the mean annual high water level of a lake, river, stream, spring, or slough, or the mean higher high water level of coastal waters, and a lift station, holding tank, septic tank, soil absorption system, seepage pit, pit privy, or other wastewater collection, treatment, or disposal system is 100 feet, measured horizontally.

(c) Except as otherwise provided in this section, the minimum separation distance between the source of the drinking water for a private water system and a

(1) domestic wastewater treatment works, onsite disposal system, pit privy, sewer manhole and lift station, or sewer cleanout is 100 feet, measured from the nearest edge of the treatment works, disposal system, pit privy, manhole, lift station, or cleanout to the private drinking water source;

(2) community sewer line, holding tank, sanitary landfill, industrial discharge line, or other potential source of contamination, such as domestic animal or agricultural waste, is 75 feet, measured from the nearest edge of the community sewer line, holding tank, sanitary landfill, industrial discharge line, or other potential source of contamination to the private drinking water source; or

(3) private sewer line, petroleum lines and storage tanks, or drinking water treatment wastes, such as backwash water from filters and water softeners and reject water from reverse osmosis units, is 25 feet; the minimum separation distance for petroleum storage tanks does not apply to

(A) tanks that contain propane; or

(B) above-ground storage tanks or drums that, in the aggregate, have a storage capacity of less than 500 gallons of petroleum products, and that store only petroleum products necessary for the operation and maintenance of pumps, power generation systems, or heating systems associated with a potable water well or other potable water source; for purposes of this subparagraph, "petroleum products" refers to fuel and lubricants.

(d) The department will require a greater separation distance than that required by (b) or (c) of this section if the department determines that distance to be necessary to protect surface water, groundwater, or a drinking water source. The department will make this decision after considering soil classifications, groundwater conditions, surface topography, geology, past experience, or other factors relevant to protection of surface water, groundwater, or drinking water.

(e) A request for a waiver of the separation distance required by (b) or (c) of this section, and for approval of a lesser separation distance, must include a report for each waiver that is sought, including multiple waivers for a single project. The report required under this subsection must

(1) be sealed by a registered engineer; the department will waive this requirement if the department determines that

(A) the site of the proposed system is remote from a community with access to professional engineering services; and that the resulting cost of bringing a registered engineer to the site would be overly burdensome; and

(B) public health, public and private water systems, and the environment are adequately protected without this requirement;

(2) justify the lesser distance and explain how the lesser distance does not threaten public health, public and private water systems, or the environment;

(3) describe soil classifications, groundwater conditions, surface topography, geology, and other environmental conditions that would assist the department in establishing a lesser separation distance; and

(4) include a set of plans, consisting of

(A) record drawings if the department determines them necessary to evaluate the request;

(B) an accurate description, including the location, of potential sources of contamination, surface water, groundwater, and existing or potential drinking water sources in the area; and

(C) the details of the system design that

(i) address the physical and environmental conditions in (3) of this subsection; and

(ii) will prevent contamination of the surface water, groundwater, or drinking water sources identified in (B) of this paragraph at the lesser distance; and

(D) other information the department determines to be necessary to assess the effect of a lesser distance upon public health, public and private water systems, and the environment.

(f) In accordance with 18 AAC 72.060, the department will approve a waiver of the separation distance required by (b) or (c) of this section if the department finds, after review of the report submitted under (e) of this section, that a lesser separation distance does not threaten public health or the environment and protects surface water, groundwater, and existing or potential drinking water sources. As necessary to protect public health and the environment, and to protect surface water, groundwater, and existing or potential drinking water sources, the department will require changes to system design as a condition of approval, including increased depth of grout and changes to the pipe material, pipe bedding, joints, and pipe strength.

(g) A person may not install

(1) a septic tank or soil absorption system directly above or below a water line at any distance, or within 10 horizontal feet of a water line; or

(2) a sewer line directly above or below at any distance, or within 10 horizontal feet of a water line, unless

(A) the required location or separation distance cannot be met because of the site configuration, the system design, or the presence of other obstacles that have regulated separation distance requirements;

(B) the sewer line is designed and constructed in a manner equivalent to the requirements for a potable water pipe, and

(i) is pressure tested to ensure watertightness; or

(ii) is enclosed in a carrier pipe of similar strength and rating as the actual pipe, or of a strength and rating approved by the department as protective of public health, public and private water systems, and the environment;

(C) the sewer line is in a separate trench from the water line; and

(D) at locations where sewer and water lines must cross,

(i) the sewer line is installed below the water line to the maximum length possible until existing appurtenances, elevations, or depth-of-cover requirements prohibit such installation;

(ii) the sewer line uses a bedding that is specially designed to protect the integrity of the sewer line in places where the elevation of a water line is below a sewer line;

(iii) the sewer line joints are at least nine feet from the water line joints; and

(iv) the sewer line is at least 18 vertical inches from a water line.

(h) Upon determining that a waiver will not threaten public health, public and private water systems, or the environment, the department will waive the requirements of (g) of this section in accordance with 18 AAC 72.060

(1) for a utilidor, if the water line is above the sewer line, and

(A) for an above-ground utilidor, the utilidor will not flood if pipe failure occurs; or

(B) for an underground utilidor, the utilidor is drained to a low point within the utilidor and has an automatic pumping and alarm system; or

(2) on a case-by-case basis, if design plans, reports, or drawings supporting a request for a lesser vertical and horizontal separation distance between water and sewer lines or for other configurations are sealed by a registered engineer.

(i) A person may not install a pit privy in an area subject to flooding. The vertical separation between the lowest point of a pit privy and the water table, measured during the season of the year with maximum water table elevation, must be at least four feet.

(j) The minimum vertical separation between the lowest part of a conventional soil absorption system and

(1) the water table, as measured during the season of the year with maximum water table elevation, must be at least four feet; and

(2) underlying bedrock, clay, or other impermeable strata must be at least six feet. (Eff. 4/1/99, Register 149; am 3/25/2001, Register 157)

Authority:	AS 44.46.020	AS 46.03.050	AS 46.03.090
	AS 44.46.025	AS 46.03.070	AS 46.03.100
	AS 46.03.020	AS 46.03.080	AS 46.03.720

Editor's note: Examples of the bedding described in 18 AAC 72.020(g)(2)(D)(ii) include Type 4 or Type 5 bedding described in American Water Works Association Standard C600-93, listed in 18 AAC 72.070(c)(2).

18 AAC 72.025. Holding tanks. (a) A person may install or use a holding tank if

(1) the department finds that permafrost or other soil conditions preclude the use of a soil absorption system or other subsurface domestic wastewater disposal system;

(2) the tank holds at least 1,000 gallons, plus 250 gallons per bedroom over three served by the tank;

(3) the tank is regularly pumped to prevent overflow;

(4) the tank is equipped with a high water alarm that will alert the home's occupants that pumping is required; and

(5) plans are approved under 18 AAC 72.200.

(b) This section does not apply to

(1) marine sanitation devices; or

(2) holding tanks contained in a mobile food unit permitted under 18 AAC 31.
(Eff. 4/1/99, Register 149)

Authority:	AS 44.46.020	AS 46.03.070	AS 46.03.100
	AS 46.03.020	AS 46.03.080	AS 46.03.720
	AS 46.03.050		

Editor's note: The discharge of domestic wastewater from vessels is regulated by federal standards of performance for marine sanitation devices under 33 U.S.C. 1322 (Clean Water Act, sec. 312).

18 AAC 72.030. Pit privies. A person may install a pit privy if the pit privy meets the separation distance requirements in 18 AAC 72.020(b), (c), and (i). A person may not dispose of graywater in a pit privy. (Eff.4/1/99, Register 149)

Authority:	AS 44.46.020	AS 46.03.070	AS 46.03.100
	AS 46.03.020	AS 46.03.080	AS 46.03.720
	AS 46.03.050		

18 AAC 72.035. Conventional onsite systems. (a) A person may install a septic tank if

(1) the design and construction of the septic tank, exclusive of tank capacity, meets the minimum specifications for septic tanks contained in Appendix K of the state's plumbing code as required under AS 18.60.705 and 18 AAC 72.070(b);

(2) a septic tank serving a single-family home or duplex has a capacity of at least 1,000 gallons, plus 250 gallons per bedroom over three served by the tank;

(3) the net minimum volume of a septic tank serving structures other than those described in (2) of this subsection is

(A) at least 1,000 gallons for systems with daily design flows up to 750 gpd;

(B) at least 1.5 times the daily design flow for systems with daily design flows between 750 and 1,500 gpd; or

(C) at least 1,125 gallons plus 0.75 times the daily design flow for systems with daily design flows exceeding 1,500 gpd;

(4) septic tank access openings have watertight covers that are

(A) bolted;

(B) padlocked;

(C) covered with at least 12 inches of backfill; or

(D) otherwise securely fastened in place; and

(5) the installation of a septic tank is completed by a person described in 18 AAC 72.015(b), (c), or (d).

(b) Except as provided in (d) of this section and 18 AAC 72.200(b), plans for a conventional onsite system must be approved by the department as required by 18 AAC 72.200.

(c) A conventional onsite system must have frost penetration protection that meets the requirements of Table A of this subsection, such as adequate depth of burial, mounding above grade, or insulation.

TABLE A. INSULATION REQUIREMENTS	
Geographical Area	Depth of Ground Cover or Insulation Equivalent
Southeast Alaska (east of 141° W. longitude)	3 feet of cover
Southwest Alaska (Kodiak Island Borough and all areas southwest of Chignik, including Chignik)	2 feet of cover
The area within the Valdez corporate boundary, and the coastal area south and east of Valdez to 141° W. longitude	3 feet of cover
All remaining areas of the state	4 feet of cover
For up to two feet of the required ground cover, the applicant may substitute insulation material that does not absorb water, with department approval of material type and thickness as protective of public health, public and private water systems, and the environment, except that at least two feet of ground cover must be maintained.	

(d) A person may install a conventional onsite system without plan approval if

(1) the system is for a single-family home, a duplex, or a small commercial facility;

(2) the installation of the system is completed by a person described in 18 AAC 72.015(b), (c), or (d);

(3) the installation complies with the *Installer's Manual for Conventional Onsite Domestic Wastewater Treatment and Disposal Systems*, adopted by reference in 18 AAC 72.070(a)(1);

(4) the design of the system conforms to standard sanitary engineering principles and practices and adequately protects public health, the environment, and public and private water systems;

(5) the system is located in soils classified as GW, GP, GM, SW, SP, or SM under the Unified Soil Classification System;

(6) the system has a minimum infiltrative area in accordance with Table B of this subsection, or the soils and the minimum infiltrative area conform to the requirements of 18 AAC 72.260(a)(4)(A) and (D);

TABLE B. ABSORPTION FIELD AREA REQUIREMENTS FOR UNIFIED SOIL CLASSIFICATION		
Unified Class	Description	Minimum infiltrative area,* measured in square feet per bedroom
GW*	Well-graded gravels	85
GP*	Poorly-graded gravels	115
SW	Well-graded sands	125
SP	Poorly-graded sands	150
GM**	Silty gravels	225
SM**	Silty sands	275
<p>*GW and GP soils are unsuitable for use in absorption areas unless a two-foot thick layer of sand, meeting the requirements of 18 AAC 72.260(a)(4)(D), Table C, Note 1, is placed between the distribution rock and the receiving soil; the department will waive this requirement if a waiver does not threaten public health, public and private water systems, or the environment, and in accordance with 18 AAC 72.060.</p> <p>** Use of these soils in absorption areas require a percolation test by a registered engineer, conducted in accordance with 18 AAC 72.265(9).</p>		

(7) the system complies with the separation distances set out in 18 AAC 72.020;

(8) the ground surface slope is less than 25 percent for trenches, and less than five percent for beds;

(9) as shown in Figure 1 of this subsection, at least 50 feet separates any part of the soil absorption system from any slope greater than 25 percent, whether man-made or natural, with a drop in the surface height greater than 10 feet; and

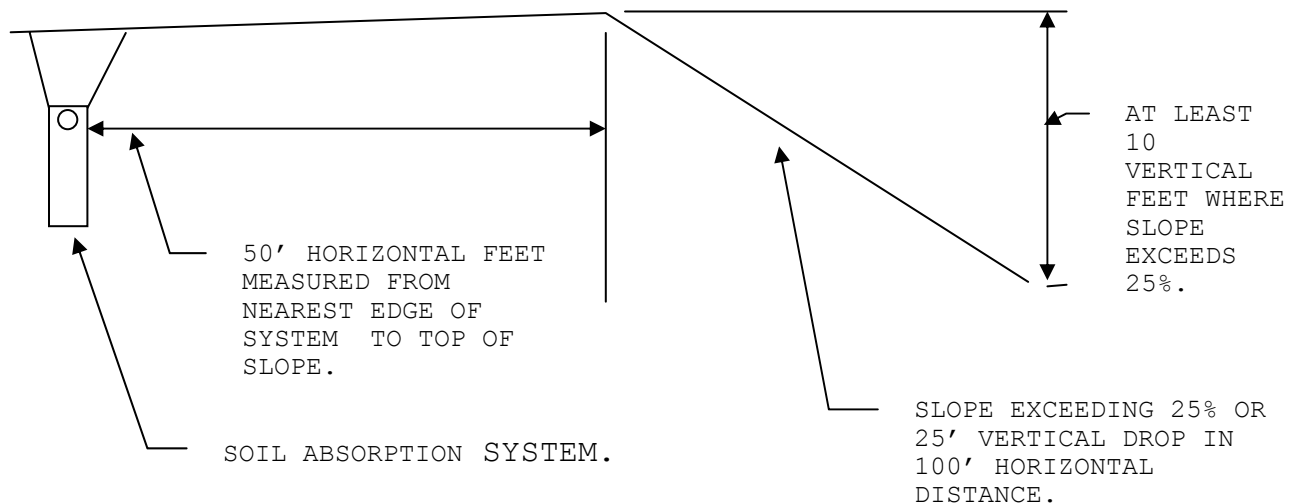


Figure 1.

(10) the system is not located in an area

- (A) known or suspected to contain permafrost;
- (B) where similar systems have been known to fail;
- (C) where a high groundwater table or poor soil conditions exist; or
- (D) where the department finds that a discharge threatens public health, public and private water systems, or the environment.

(e) Under 18 AAC 72.060, the department will, in its discretion, grant a waiver from the requirements of (d)(8) and (d)(9) of this section for a conventional onsite system if, under the waiver, the system operates in a manner protective of public health, public and private water systems, and the environment, and if existing soil types, vegetation, geologic factors, hydrologic factors, or other pertinent factors show that there is reasonable assurance that wastewater will not surface downslope, and that an unstable slope condition will not be created. (Eff. 4/1/99, Register 149)

Authority:	AS 44.46.020	AS 46.03.050	AS 46.03.090
	AS 44.46.025	AS 46.03.070	AS 46.03.100
	AS 46.03.020	AS 46.03.080	AS 46.03.720

Editor's note: For guidance on designs for conventional onsite systems that would satisfy the requirements of 18 AAC 72.035(d)(4), see the references listed at 18 AAC 72.070(c)(12) and (15).

18 AAC 72.040. Discharge to sewers. (a) As necessary to protect public health, public and private water systems, and the environment, the department will require that flows to a domestic wastewater disposal system be pretreated and equalized to prevent

(1) overloading of or damage to the sewer, domestic wastewater treatment works, or disposal system; or

(2) pollution of receiving waters.

(b) Subject to (c) of this section, a person may not

(1) discharge stormwater, silty water from construction dewatering efforts, gutter runoff, or street runoff into a sewer designed to handle only domestic or nondomestic wastewater flows without stormwater;

(2) discharge oil, petroleum products, industrial solvents, or other substances detrimental to treatment processes or operation into

(A) a sewer designed to handle only domestic wastewater or stormwater;
or

(B) a wastewater treatment facility or process not designed to handle these substances;

(3) cause any connection or additional discharge to a domestic wastewater treatment works or domestic wastewater disposal system that the department has found to be overloaded or inadequate; in making a finding under this paragraph, the department will consider original plans or record drawings, compliance history, or discharge monitoring reports; or

(4) install a sewer line unless it

(A) has a mean conduit velocity, when flowing full, of not less than two feet per second;

(B) is designed for the maximum expected flow; and

(C) is designed so that the diameter of any receiving sewer line is equal to or greater than the diameter of the largest sewer line connecting to it.

(c) The department will, in its discretion, and in accordance with 18 AAC 72.060, grant a waiver from the requirements

(1) of (b)(4) of this section for sewers

(A) proposed for areas of the state that are subject to permafrost conditions; or

(B) designed to receive a clarified effluent from primary treatment systems, such as septic tank effluents; or

(C) designed as vacuum sewers; and

(2) of (b)(4)(C) of this section if calculations are provided to the department that demonstrate that the capacity of the receiving sewer line will handle the flow. (Eff. 4/1/99, Register 149)

Authority:	AS 44.46.020	AS 46.03.070	AS 46.03.100
	AS 46.03.020	AS 46.03.080	AS 46.03.720
	AS 46.03.050		

18 AAC 72.050. Minimum treatment. (a) A person may discharge domestic wastewater into or onto water or land if the discharge

(1) to surface land has received secondary treatment, and if the discharge is a potential health hazard, the discharge has been disinfected;

(2) to subsurface land has received primary treatment and is discharged to a soil absorption system; the department will require additional treatment if the discharge is a potential health hazard;

(3) from a community domestic wastewater treatment works to water has received secondary treatment; and

(4) from a source that is ineligible for a waiver under 33 U.S.C. 1311(h) (Clean Water Act, sec. 301(h)) to water has received secondary treatment.

(b) The department will require treatment in addition to the minimum set out in this section if necessary to protect public health, public and private water systems, or the environment. In deciding to increase treatment under this section, the department will consider whether the discharge is to a sensitive receiving environment, whether the discharge is to the surface or subsurface, and other permit or plan approval conditions.

(c) Under 18 AAC 72.060, the department will waive the requirements of (a)(3) of this section and reduce the minimum treatment requirements for a community domestic wastewater treatment works, if the department determines that the reduced requirements will protect public health, public and private water systems, and the environment, and if

(1) a modified treatment level has been established for the discharge of domestic wastewater to marine water under 33 U.S.C. 1311(h) (Clean Water Act, sec. 301(h)), and the modified treatment level complies with at least primary treatment requirements;

(2) before the establishment of a modified treatment level as described in (1) of this subsection, and upon review of a completed application for a modified treatment level under

33 U.S.C. 1311(h), the department finds that an interim lesser degree of treatment will meet primary treatment requirements during the period that the EPA reviews the application;

(3) alternative percentage removal requirements for biochemical oxygen demand and suspended solids have been established by the EPA under 40 C.F.R. 133.103(a), revised as of July 1, 1997;

(4) the values for biochemical oxygen demand or suspended solids are increased by the EPA under 40 C.F.R. 133.103(b), revised as of July 1, 1997; or

(5) the minimum levels of discharge of suspended solids from a waste stabilization pond are adjusted by the EPA under 40 C.F.R. 133.103(c), revised as of July 1, 1997.

(d) Under 18 AAC 72.060, the department will waive the requirements of (a)(1) or (a)(4) of this section and reduce the minimum treatment requirements, if the department determines that the reduced requirements will protect public health, public and private water systems, and the environment. A person seeking a reduced level of treatment must submit a report that

(1) explains how public health, public and private water systems, and the environment will be adequately protected with the reduced level of treatment proposed;

(2) describes the volume, characteristics, frequency, and duration of the discharge;

(3) includes the plans required by 18 AAC 72.200;

(4) identifies water and existing or potential drinking water sources within 200 feet of the discharge area; and

(5) describes any other environmental factor that is important in approving the lesser treatment level, including,

(A) for a domestic wastewater discharge to surface land

(i) local soil classification and groundwater conditions;

(ii) surrounding topographic, geologic, and soil characteristics;

and

(iii) existing and potential uses of the land, including food processing, food gathering, housing, education, industry, recreation, and agriculture; and

(B) for a graywater discharge to fresh water, or for a domestic wastewater discharge to marine water

(i) the hydrological characteristics of the receiving water, including flushing ability, tide, and current;

(ii) local topographic, geologic, and soil characteristics; and

(iii) existing and potential uses of the water, including drinking, aquaculture, food processing, food gathering, fishing, boating, swimming, and recreation.

(e) A person may not discharge domestic wastewater with less than primary treatment. (Eff. 4/1/99, Register 149)

Authority:	AS 44.46.020	AS 46.03.050	AS 46.03.080
	AS 44.46.025	AS 46.03.070	AS 46.03.090
	AS 46.03.020		

Editor's note: The discharge of domestic wastewater from vessels is regulated by federal standards of performance for marine sanitation devices under 33 U.S.C. 1322 (Clean Water Act, sec. 312).

18 AAC 72.055. Sludge disposal. A person may dispose of sludge from a septic tank, holding tank, pit privy, or domestic wastewater treatment works only at a site or facility holding a department permit for that type of disposal. (Eff. 4/1/99, Register 149)

Authority:	AS 44.46.020	AS 46.03.050	AS 46.03.710
	AS 46.03.020	AS 46.03.100	AS 46.03.720

18 AAC 72.060. Waiver or modification. (a) If the department determines that a waiver or modification of a provision of 18 AAC 72.005 - 18 AAC 72.055 will be protective of public health, public and private water systems, and the environment, the department will waive or modify that provision.

(b) The department's decision under (a) of this section will be based upon information submitted in a report by a registered engineer, including information about effluent quality and quantity, soil and groundwater conditions, surface water and topography, geology, water and land uses, construction methods and materials, information required in applicable specific waiver provisions of 18 AAC 72.005 – 18 AAC 72.060, and information about any other factor pertinent to environmental quality, public and private water systems, or public health. A request for a waiver or modification under this section must be accompanied by the fee required by 18 AAC 72.955, 18 AAC 72.956 or 18 AAC 72.957. (Eff. 4/1/99, Register 149; am 1/17/2002, Register 161)

Authority:	AS 44.46.020	AS 46.03.050	AS 46.03.090
	AS 44.46.025	AS 46.03.070	AS 46.03.100
	AS 46.03.020	AS 46.03.080	AS 46.03.720

18 AAC 72.065. Certified operator requirement for certain domestic wastewater

systems. The owner or operator of a domestic wastewater system that has 100 or more service connections or that is used, or intended for use, by 500 or more people per day shall ensure that the system is operated by a person certified under 18 AAC 74. (Eff. 4/1/99, Register 149)

Authority:	AS 44.46.020	AS 46.03.100	AS 46.03.720
	AS 46.03.020	AS 46.03.710	AS 46.30.040
	AS 46.03.050		

18 AAC 72.070. Reference materials. The following materials are adopted by reference:

(1) the department's *Installers Manual for Conventional Onsite Domestic Wastewater Treatment and Disposal Systems*, revised as of August 1, 2000;

(2) Chapter 10 from *A 1979 State of the Art Manual of On-Site Wastewater Management*, 1979, National Environmental Health Association;

(3) *National Sanitation Foundation Standard No. 40 for Individual Aerobic Wastewater Treatment Plants*, revised as of May 1983, National Sanitation Foundation;

(4) Chapter 7 and Table 3-8 from *Design Manual: Onsite Wastewater Treatment and Disposal Systems*, EPA 625/1-80-012, October 1980, United States Environmental Protection Agency, Office of Water Program Operations, Office of Research and Development.

(b) The department will use the requirements of the state plumbing code, as developed under AS 18.60.705, in evaluating plans submitted for approval under this chapter.

(c) As guidance for meeting the requirements of this chapter, the use of the recommended principles, practices, and designs, set out in the following reference materials, is encouraged by the department:

(1) *Alternative Sewer Systems, Manual of Practice Number FD-12*, 1986, Water Pollution Control Federation;

(2) *American Water Works Association, Standard C600-93, Installation of Ductile Iron Water Mains and Their Appurtenances*, American Water Works Association;

(3) *Cold Climate Utilities Manual*, Canadian Society for Civil Engineers, 1986, Canadian Society for Civil Engineers;

(4) *Design and Construction of Sanitary and Storm Sewers, Manual of Practice Number 9*, 1976, Water Pollution Control Federation;

(5) *Design of Wastewater and Stormwater Pumping Stations, Manual of Practice No. FD-4*, 1981, Water Pollution Control Federation;

(6) *Environmental Engineering and Sanitation*, Second Edition, Joseph A.

Salvato, Jr., 1972, John Wiley & Sons;

(7) *Glossary - Water and Wastewater Control Engineering*, Joint Editorial Board, American Public Health Association, American Society of Civil Engineers, American Water Works Association, and Water Pollution Control Federation; Third Edition, 1981, Water Pollution Control Federation;

(8) *Gravity Sanitary Sewer Design and Construction, Manual of Practice No. FD-5*, 1982, Water Pollution Control Federation (American Society of Civil Engineers Manuals and Reports on Engineering Practice No. 60);

(9) *High Rate Soil Absorption (HRSA) Task Force, Recommendations on Key Management Issues*, 1984, Minnesota Pollution Control Agency;

(10) *Mixing in Inland and Coastal Waters*, H.B. Fischer, E.J. List, R.C.Y. Koh, J. Imberger, N.H. Brooks, 1979, Academic Press, Inc.;

(11) *On-Site Wastewater Treatment, Proceedings of the Fourth National Symposium on Individual and Small Community Sewage Systems*, "Estimating Groundwater Quality Impacts from On-site Sewage Treatment Systems," B. J. Bauman and W. M. Schafer, 1985, American Society of Agriculture Engineers;

(12) *Design Manual: Onsite Wastewater Treatment and Disposal Systems*, EPA 625/1-80-012, October 1980, United States Environmental Protection Agency, Office of Water Program Operations, Office of Research and Development;

(13) *Recommended Standards for Sewage Works*, Great Lakes-Upper Mississippi River Board Of State Sanitary Engineers, 1978, Health Education Service, Inc.;

(14) *Septic Tank System Effects On Ground Water Quality*, 1985, Larry W. Canter, and Robert C. Knox, Lewis Publishers, Inc.;

(15) *A 1979 State of the Art Manual of On-Site Wastewater Management*, 1979, The National Environmental Health Association;

(16) "The Use of the Unified Soil Classification System by the Bureau of Reclamation," A.A. Wagner, in *Proceedings of the 4th International Conference on Soil Mechanics and Foundation Engineering, London, Vol. I*, 1957; also cited in *Handbook of Environmental Civil Engineering*, Robert G. Zilly, ed., 1975, p. 91, Van Nostrand Reinhold Co.;

(17) *Wastewater Engineering: Treatment, Disposal, Reuse*, Second Edition, Metcalf & Eddy, Inc., revised by George Tchobanoglous, 1979, McGraw-Hill Book Co.;

(18) *Wastewater Treatment Plant Design, Manual of Practice Number 8*, 1977, Water Pollution Control Federation. (Eff. 4/1/99, Register 149; am 3/25/2001, Register 157)

Authority: AS 44.46.020 AS 46.03.050 AS 46.03.720

AS 46.03.020

AS 46.03.090

Editor's Note: The documents listed in 18 AAC 72.070 are available for viewing at the department's Anchorage, Fairbanks, Juneau, Soldotna, and Wasilla offices. Copies of the references listed at 18 AAC 72.070(c)(9) may be obtained from those offices. The documents listed in 18 AAC 72.070 may be purchased directly from the publishers at the following addresses:

Academic Press, Inc., 465 Lincoln Dr., Troy, MO 63379;
American Society of Agriculture Engineers, 2950 Niles Rd., St. Joseph, MI 49085-9659;
American Water Works Association, 6666 W. Quincy Ave., Denver, CO 80235;
Canadian Society for Civil Engineers, 2050 Mansfield St., Montreal PQ H3A 1Z2,
Canada; telephone (514) 842-5653;
Health Education Service, Inc., P.O. Box 7126, Albany NY 12224;
John Wiley & Sons, 1 Wiley Dr., Somerset, NJ 08875;
Lewis Publishers, Inc., 121 S. Main St., P.O. Drawer 519, Chelsea, MI 48118;
McGraw-Hill Book Co., 148 Princeton-Hightstown Rd., Hightstown, NJ 08520-1450;
Minnesota Pollution Control Agency, 520 Lafayette Rd. North, St. Paul, MN 55155;
National Environmental Health Association, 720 S. Colorado Blvd., Suite 970, Denver,
CO 80222;
National Sanitation Foundation, P.O. Box 1468, NSF Building, Ann Arbor, MI 48106;
United States Environmental Protection Agency, Office of Research and Development,
Cincinnati, OH 45268;
Van Nostrand Reinhold Co., 450 W. 33rd St., New York, NY 10001;
Water Pollution Control Federation, 601 Wythe St., Alexandria, VA 22314-1994.

Article 2. Domestic Wastewater System Plan Review.**Section**

- 200. Application for department approval
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18 AAC 72.200. Application for department approval. (a) Except as otherwise provided in 18 AAC 72.035(d) and (b) of this section, a person must submit a plan to the department and obtain approval of that plan before constructing, installing, or modifying any part of a domestic wastewater collection, treatment, or disposal system. To obtain approval, a person shall provide to the department the information required by 18 AAC 72.205.

(b) Written approval is not required for an emergency repair or routine maintenance. The owner or operator shall notify the department as described in 18 AAC 72.940 if the system malfunctions.

(c) The department will base its approval of system plans exclusively on the provisions of AS 46.03 and this chapter.

(d) The department will evaluate on a case-by-case basis applications for domestic wastewater system plan approval proposing a method of wastewater treatment or disposal not addressed in this chapter, and will consider the plan review provisions, recommendations from a technical review committee assembled under 18 AAC 72.007, and other applicable approval criteria set out in AS 46.03 and this chapter. (Eff. 4/1/99, Register 149)

Authority:	AS 44.46.020	AS 46.03.050	AS 46.03.720
	AS 46.03.020	AS 46.03.090	

18 AAC 72.205. Submittal requirements. (a) To obtain approval of plans for collection, treatment, and disposal of domestic wastewater required by 18 AAC 72.200, the applicant must submit to the department

- (1) the plan review fee required by 18 AAC 72.955;
- (2) a completed system plan review data sheet, on a form supplied by the department or a document that contains the same information, including
 - (A) the project name and description;
 - (B) the general location of the project;
 - (C) the project owner's name, address, and telephone number;
 - (D) the name, address, and telephone number of a person to contact regarding matters relating to project approval; and
 - (E) a description of the type of wastewater project proposed;
- (3) a completed owner's statement,
 - (A) on a form supplied by the department or a document that contains the same information; and
 - (B) signed in accordance with 18 AAC 15.030;
- (4) plans consisting of reports or drawings that
 - (A) clearly and legibly depict the design;
 - (B) demonstrate compliance with the applicable approval criteria in 18 AAC 72.220 - 18 AAC 72.275; and
 - (C) demonstrate that
 - (i) the system meets the minimum design criteria of this chapter;
 - (ii) a discharge, if any, from the system meets the standards of quality for surface water and groundwater set out in 18 AAC 70; and
 - (iii) the system protects drinking water sources and systems;
- (5) a statement identifying each permit that the department requires for the project; if a required permit has not been secured, but an application for that permit has been submitted for department review, the department will, upon request of the applicant, review the domestic wastewater system plans; the department will condition an approval to construct under 18 AAC 72.225 upon the project receiving all required department permits, with permit disposal limits equal to or less stringent than the assumed values used in preparing and reviewing the wastewater system design;

(6) unless a domestic wastewater system serves only one single-family home, one duplex, or one commercial building, documentation showing the existence, or formation before beginning construction of the system, of a local government organization, a homeowner's association, a private utility, a commercial entity, or other entity, the purpose of which is to operate and maintain the system; if a public utility within the meaning of AS 42.05.990 operates the system, documentation under this paragraph must include a certificate of public convenience and necessity issued by the Alaska Public Utilities Commission under AS 42.05.221;

(7) for a domestic wastewater system that has 100 or more service connections or that is used, or intended for use, by 500 or more individuals per day, documentation showing that the operator is or will be certified as required by 18 AAC 74 before operation of the system;

(8) a description of measures to protect nearby surface water from siltation or other contamination resulting from construction of the project;

(9) a description of the provisions to maintain operation of necessary existing flow or treatment processes affected by the project during construction; and

(10) if a wastewater discharge is proposed to an existing collection or disposal system, documentation showing that

(A) the receiving system has sufficient capacity to accommodate flows expected from the proposed discharge; and

(B) the owner of the receiving system has approved the discharge.

(b) Plans submitted in accordance with (a)(4) of this section must be prepared and sealed by a registered engineer for

(1) a system that otherwise would be a conventional onsite system except that the system does not meet the requirements of 18 AAC 72.035(d)(5) for soil type;

(2) a conventional onsite system that

(A) has an average daily design flow of less than 2,500 gpd; and

(B) is installed in an area where

(i) similar systems have been known to fail;

(ii) there is a high groundwater table or poor soil conditions; or

(iii) the department finds the discharge will threaten public health, public and private water systems, or the environment;

(3) a conventional onsite system with a daily design flow of 2,500 gallons or more per day;

(4) alternate onsite systems and alternate soil absorption systems including community sewer systems, package treatment plants, stabilization ponds, and collection and pumping systems;

(5) holding tanks; and

(6) other disposal systems, including marine outfalls and land surface disposal systems under 18 AAC 72.275.

(c) A person proposing a percolating or a nonpercolating stabilization pond must submit, in addition to the information required under (a) of this section, soil boring or other information that is sealed by a registered engineer and that is sufficient to evaluate the items set out in 18 AAC 72.255(a)(6) and (7) and in 18 AAC 72.265(2), (3), (4), (5), and (10).

(d) A person proposing a percolating stabilization pond must submit, in addition to the information required under (a) of this section, (c) of this section, and 18 AAC 72.255, hydrologic data and mixing calculations, sealed by a registered engineer, that demonstrate compliance with the conditions of any permit issued under this chapter.

(e) A person proposing a community soil absorption system must submit, in addition to the information required under 18 AAC 72.260 and (a) of this section,

(1) a site plan that delineates the usable domestic wastewater disposal area described in 18 AAC 72.260(a)(4) and (7);

(2) calculations in accordance with 18 AAC 72.260(a)(5); and

(3) a soils report that complies with 18 AAC 72.265.

(f) A person proposing to discharge domestic wastewater onto the surface of the land must provide documentation that

(1) the person owns the land treatment area or has written authorization from the landowner to discharge domestic wastewater onto the land;

(2) the land treatment area is protected against public access;

(3) the topography, hydrology, geology, and soil characteristics of the land treatment area are adequate to protect existing and potential water and land uses outside the land treatment area, including subsistence, housing, education, industry, recreation, and agriculture; and

(4) the method of discharge prevents disease transmission.

(g) A person proposing the use of a holding tank for wastewater disposal must submit, in addition to the information required under 18 AAC 72.025,

(1) soil and water table information that is sealed by a registered engineer as required under 18 AAC 72.205(b), and that demonstrates that a conventional or alternate onsite system is not practical because permafrost or other soil conditions preclude the use of a soil absorption system or other subsurface domestic wastewater disposal system; and

(2) a design with provisions for resisting buoyancy forces when the tank is pumped; the design's provisions must be sealed by a registered engineer as required under 18 AAC 72.205(b).

(h) Upon request, the department will provide a checklist to assist an applicant in making a complete submittal under this section. The department will return an incomplete submittal to the applicant. (Eff. 4/1/99, Register 149; am 1/17/2002, Register 161)

Authority:	AS 44.46.020	AS 46.03.020	AS 46.03.090
	AS 46.03.010	AS 46.03.050	AS 46.03.720

18 AAC 72.210. Domestic wastewater fees. Repealed. (Eff. 4/1/99, Register 149, am 1/17/2002, Register 161)

Editor's note: The fees that were located in 18 AAC 72.210 are now located in 18 AAC 72.955, 18 AAC 72.957, and 18 AAC 72.959.

18 AAC 72.215. Permit required. (a) Except for systems exempted from plan review under 18 AAC 72.200(a) or as provided in (b) of this section, in addition to a plan approval required by 18 AAC 72.200, a person who disposes of domestic wastewater in this state must have a permit issued by the department for that disposal.

(b) The department will issue a plan approval in lieu of a permit if the department determines that

(1) the system meets the requirements of AS 46.03 and this chapter:

(2) the system is protective of public health, public and private water systems, and

the environment;

(3) the discharge is not to a sensitive receiving environment; and

(4) a permit is not required under 33 U.S.C. 1311 (Clean Water Act, sec. 301).

(c) If the holder of a domestic wastewater permit proposes to modify operations in a manner that will increase a discharge, a new permit is required under 18 AAC 15.100(c).

(d) The applicant for or recipient of a permit shall pay any fee for the permit as required

by 18 AAC 72.956, 18 AAC 72.957, or 18 AAC 72.959, as applicable. (Eff. 4/1/99, Register 149, am 1/17/2002, Register 161)

Authority:	AS 44.46.020	AS 46.03.050	AS 46.03.100
	AS 44.46.025	AS 46.03.080	AS 46.03.720
	AS 46.03.020		

18 AAC 72.220. Plan review. (a) In reviewing and approving a system, the department will determine whether the system design

(1) meets the applicable approval criteria in 18 AAC 72.245 – 18 AAC 72.275; and

(2) conforms to standard sanitary engineering principles and practices or state-of-the-art technology, and whether the design adequately protects the public health, public and private water systems, and environmental quality.

(b) The department will require the applicant to provide justification for a design if, in the department's determination, the design does not adequately protect the public health, public and private water systems, or the environment.

(c) As necessary to protect public health, public and private water systems, and the environment, the department will require that designs for sewers, domestic wastewater treatment works, and domestic wastewater disposal systems have a history of meeting or exceeding the treatment or permit requirements of this chapter in comparable environmental conditions. The department will deny the use of a design described in (b) of this section if the department determines that there is a reasonable chance of failure, based on past experience with similar designs in similar circumstances. Lacking information on past performance, the department will, as necessary to protect public health, public and private water systems, and the environment,

(1) require that the applicant submit a written recommendation for the design, prepared and sealed by a registered engineer; and

(2) use the written recommendation to determine the likelihood of success or failure of the design.

(d) The department will, in its discretion, provide advisory notes to the applicant as technical assistance for items beyond the requirements of this chapter.

(e) The applicant shall pay the fee for the plan review as listed in 18 AAC 72.955 upon submittal of the plan. (Eff. 4/1/99, Register 149, am 1/17/2002, Register 161)

Authority:	AS 44.46.020	AS 46.03.020	AS 46.03.090
	AS 46.03.010	AS 46.03.050	AS 46.03.720

Editor's note: Guidance on standard sanitary engineering principles and practices, as addressed in 18 AAC 72.220, may be found in the references listed at 18 AAC 72.070(c).

18 AAC 72.225. Approval to construct. (a) Except as noted in (b) of this section, the department will issue its approval or denial to construct the project within 30 days after the department receives all of the information required by this chapter.

(b) For a project requiring a coordinated consistency review under AS 46.40.096, AS 46.40.100, and 6 AAC 50, within five days after completion of the consistency review the department will issue the approval to construct.

(c) As necessary to protect public health, public and private water systems, and the environment, the department will include terms and conditions for construction in its approval.

(d) If the applicant fails to construct, alter, install, or modify the system within two years after the date that the department issues an approval to construct under this chapter, the approval is void, and plans must be resubmitted for department review and approval. (Eff. 4/1/99, Register 149)

Authority: AS 44.46.020 AS 46.03.020 AS 46.03.720
AS 46.03.010 AS 46.03.050

18 AAC 72.230. Revisions to approved plans. (a) After plans for a system design are approved under 18 AAC 72.225, the system owner or operator must obtain written department approval before making any revision to that design that modifies or affects

- (1) capacity, flow, or operation;
- (2) the design of major system components, such as treatment systems;
- (3) the point of discharge;
- (4) materials of major system components, including pipe and stabilization pond liners; or
- (5) separation distance requirements at 18 AAC 72.020.

(b) If the revision proposed for approval under (a) of this section is to a project that required the submission of engineering plans, the revisions must

- (1) appear on the final record drawings required by 18 AAC 72.235;
- (2) be clearly depicted with respect to the original plans;
- (3) meet the applicable requirements of AS 46.03 and this chapter; and
- (4) be signed and sealed by a registered engineer.

(c) As necessary to protect public health, public and private water systems, and the

environment, the department will require remedial action to bring any revision into compliance with this chapter before issuing final approval to operate under 18 AAC 72.240. (Eff. 4/1/99, Register 149)

Authority:	AS 44.46.020	AS 46.03.020	AS 46.03.090
	AS 46.03.010	AS 46.03.050	AS 46.03.720

18 AAC 72.235. Construction certification. (a) This section applies only to projects for which engineering plans are required by 18 AAC 72.205. The owner of the project shall ensure that the system is constructed according to design plans approved by the department, or according to record drawings showing that the system was constructed as required by AS 46.03 and this chapter.

(b) Within 90 days after completion of construction, installation, or modification of the project, the owner of the project shall submit to the department

(1) record drawings prepared by the engineer responsible for observing construction of the project; each sheet of those drawings must clearly bear the record drawing date and the name of the observing engineer;

(2) a certification that the project was constructed in compliance with (a) of this section; the certification must be done on a completed “certification of construction” form, available from the department and signed by

(A) the owner

(B) each contractor who constructed the system; and

(C) the registered engineer responsible for observing construction; and

(3) a letter, signed and sealed by the observing engineer, if other than the design engineer, that documents the scope of construction observation services and identifies each person who contributed to the record documents.

(c) In this section, “construction observation” and “observing construction” mean visual observation of or visually observing the quality of construction and the equipment and materials used for construction, so that the observing engineer or a person under the engineer’s direct supervision has the information necessary to provide a professional opinion regarding the contractor’s conformance to the plans approved by the department. (Eff. 4/1/99, Register 149)

Authority:	AS 44.46.020	AS 46.03.020	AS 46.03.090
	AS 46.03.010	AS 46.03.050	AS 46.03.720

18 AAC 72.240. Approval to operate. (a) For a project that requires plan approval under 18 AAC 72.200, but does not require engineering plans, an approval to operate the system will accompany the approval to construct the system.

(b) For a wastewater collection, treatment, or disposal system, or designated phases of such a system for which engineering plans are required in 18 AAC 72.205,

(1) an approval to operate the system for a 90-day interim period will accompany the approval to construct the system;

(2) operation of the system, or a designated phase of the system, beyond the 90-day interim period is prohibited unless

(A) the system, or a designated phase of that system, has received final approval from the department to operate under this section; or

(B) the department, to the extent that an extension is protective of public health, public and private water systems, and the environment, extends the 90-day interim period in order to provide additional time for the owner of the project to submit the information required by 18 AAC 72.235; and

(3) the department will issue final approval to operate within 30 days after receipt of the information required by 18 AAC 72.235 if the information confirms that

(A) the system was constructed as originally approved; or

(B) the system, or a designated phase of that system, otherwise meets the requirements of AS 46.03 and this chapter.

(c) The department will require periodic groundwater monitoring as a condition to operate if the department finds that there is a concern about public health, public and private water systems, or the environment. (Eff. 4/1/99, Register 149)

Authority: AS 44.46.020 AS 46.03.020 AS 46.03.720
AS 46.03.010 AS 46.03.050

18 AAC 72.245. Treatment works. The department will approve plans for construction of a domestic wastewater treatment works if

(1) the submittal requirements of 18 AAC 72.205 are met;

(2) the design or design criteria for the following parameters meet the requirements of 18 AAC 72.220:

(A) design flows and waste loads;

(B) treatment capacities;

(C) selection and arrangement of unit operations and processes;

(D) siting with respect to potential for health hazards, nuisances,

and flooding;

(E) bedding and backfill;

(F) methods to control operational variables;

(G) methods and location of disposal of sludges, septage, grit, screenings, and other facility residuals;

(H) thermal protection considerations;

(3) all plans, reports, and drawings submitted are sealed by a registered engineer, if engineering plans are required by 18 AAC 72.205;

(4) the plan provides for maintaining operation of necessary existing processes during construction;

(5) adequate measures are taken to protect nearby surface water from siltation or other contamination resulting from construction of the facility;

(6) facility bypasses are controlled;

(7) separation distances from any part of the system comply with 18 AAC 72.020;

(8) final grading and drainage directs surface runoff away from facilities; and

(9) the treatment works is proposed to discharge to an existing collection or disposal system, and adequate documentation demonstrates that

(A) the receiving system has sufficient capacity to accommodate flows expected from the proposed discharge; and

(B) the owner of the receiving system has approved the discharge.
(Eff. 4/1/99, Register 149)

Authority:	AS 44.46.020	AS 46.03.020	AS 46.03.090
	AS 46.03.010	AS 46.03.050	AS 46.03.720

18 AAC 72.250. Utilidors. The department will approve plans for construction of a publicly operated utilidor if

(1) the submittal requirements of 18 AAC 72.205(a) are met;

(2) the utilidor is designed in accordance with standard sanitary engineering principles and practices or state-of-the-art technology;

(3) the design adequately protects public health, public and private water systems, and the environment;

(4) the plans are signed and sealed by a registered engineer; and

(5) the utilidor complies with the separation distance requirements in 18 AAC 72.020 (Eff. 4/1/99, Register 149)

Authority:	AS 44.46.020	AS 46.03.020	AS 46.03.090
	AS 46.03.010	AS 46.03.050	AS 46.03.720

Editor's note: Some examples of designs for utilidors may be found in the references listed in 18 AAC 72.070.

18 AAC 72.255. Stabilization ponds. (a) The department will approve plans for construction of a stabilization pond if

(1) the submittal requirements of 18 AAC 72.205(a) are met;

(2) the submittal requirements of 18 AAC 72.205(c) for a nonpercolating stabilization pond, or of 18 AAC 72.205(c) and (d) for a percolating stabilization pond, are met;

(3) the design or design criteria for the following parameters meet the requirements of 18 AAC 72.220:

(A) design flows and waste loads;

(B) treatment capacities;

(C) siting with respect to potential for health hazards, nuisances, flooding, and effect on groundwater;

(D) dike design, materials, construction, and safety;

(E) permeability of impoundment seal;

(F) methods to control operational variables;

(G) methods and location of sludge or septage disposal;

(H) thermal protection considerations;

(4) the provisions of 18 AAC 72.245(3) - (9) are met;

(5) soil test holes, soil analysis, and the soil report meet the criteria of 18 AAC 72.265(2) - (5), and (10);

(6) soil borings and analysis show that the vertical separation between the lowest part of the system and

(A) the seasonal high water table is at least four feet; and

(B) bedrock, clay, or other impermeable strata with an expected percolation rate greater than 120 minutes per inch is at least six feet;

(7) test holes are located, and tests are conducted, to yield data representative of the area planned for the system;

(8) the number of test holes is that number necessary to adequately evaluate subsurface characteristics of the area planned for the system;

(9) for nonpercolating stabilization ponds, the coefficient of permeability of the seal does not exceed an equivalent percolation rate of 500 gpd per acre at a water depth of six feet; and

(10) for percolating stabilization ponds

(A) a wastewater discharge permit has been issued, and mixing calculations for any required mixing zone demonstrate compliance with

(i) permit conditions under AS 46.03 and this chapter; and

(ii) water quality standards at 18 AAC 70; and

(B) hydrologic data demonstrate that permit conditions will be met and that use of the stabilization pond will not interfere with existing public and private drinking water sources.

(b) As necessary to protect public health, public and private water systems, and the environment, the department will require periodic groundwater monitoring as a wastewater discharge permit condition. (Eff. 4/1/99, Register 149)

Authority:	AS 44.46.020	AS 46.03.020	AS 46.03.090
	AS 46.03.010	AS 46.03.050	AS 46.03.720

18 AAC 72.260. Community and alternate soil absorption systems. (a) The department will approve the plans for construction of a community or alternate soil absorption system if

(1) the submittal requirements of 18 AAC 72.205 are met;

(2) the design or design criteria for the following parameters meet the requirements of 18 AAC 72.220:

- (A) design flows and waste loads;
 - (B) primary treatment and treatment area configuration and design;
 - (C) siting with respect to potential for health hazards, nuisances, and effect on groundwater;
 - (D) methods to control operational variables;
 - (E) methods and location of disposal of sludges, septage, and other facility residuals;
 - (F) thermal protection considerations;
- (3) the provisions of 18 AAC 72.245(3) - (9) are met;
- (4) a sufficient usable wastewater disposal area exists with characteristics for both an initial and a replacement soil absorption system as follows:
- (A) the soils report under 18 AAC 72.265 shows that the soil types, percolation rates, and depths to seasonal high water table and impermeable strata are suitable for the type of soil absorption system selected;
 - (B) subject to (C) of this paragraph, the restrictions at 18 AAC 72.035(d)(8) and (9) are met;
 - (C) for an alternate soil absorption system, the ground surface slope, distance to escarpments, and the size of the infiltrative surface conform to standard sanitary engineering principles and practices; and
 - (D) for a conventional soil absorption system, the size of the minimum infiltrative area is calculated from the wastewater application rate in Table C of this subparagraph that corresponds to the observed soil texture or the observed percolation rate;

TABLE C. WASTEWATER APPLICATION RATES FROM PERCOLATION TEST RESULTS

Observed Percolation Rate ^a Minutes/inch	Soil Texture	Application Rate in gal/day/ft ² for design flow less than or equal to 2,500 gal/day	Application Rate in gal/day/ft ² for design flow greater than 2,500 gal/day
Faster than 1	Gravel, coarse sand	Not suitable ^b	Not suitable ^b
1-5	Coarse to medium sand	1.2	0.79 - 0.98
6-15	Fine sand, loamy sand	0.8	0.61 - 0.74
16-30	Sandy loam, loam	0.6	0.52 - 0.61
31-60 ^c	Loam, porous silt loam	0.45	0.25 - 0.52
61-120 ^d	Silty clay loam, clay loam ^e	Not suitable ^d	Not suitable ^d

- a.** Percolation tests must be performed in accordance with 18 AAC 72.265(9). Submitted plans may prorate the soil application rate to match observed percolation rates; soils faster than five minutes per inch may be visually rated.
- b.** Soils with percolation rates faster than one minute per inch may be used if a shallow absorption trench or bed system is used, if native soils are replaced by a layer of medium-graded sands, as defined in Note 1 below, that is no less than two feet deep, and if application rates less than or equal to 1.2 gallons/day/ft² are used; these systems are subject to department approval on a case-by-case basis if protective of public health, public and private water systems, and the environment; the department will waive the requirement for a sand liner in the manner set out in 18 AAC 72.060.
- c.** Soils with percolation rates slower than 30 minutes per inch are unsuitable for seepage pits.
- d.** Suitable for elevated mounds or conventional systems, with prior department approval.
- e.** Soils without expandable clays.

Note 1. Subject to a waiver under 18 AAC 72.060, sands for sand liners installed in soils with percolation rates faster than one minute per inch must meet all of the criteria in at least one of the two following groups of minimum specifications, using sieves with standard U.S. sieve numbers:

Group A: 85-100 percent passing a #10 sieve (less than 2.0 mm); 60-90 percent passing a #20 sieve (less than 0.850 mm); 25-50 percent passing a #40 sieve (less than 0.425 mm); less than or equal to 15 percent passing a #60 sieve (less than 0.250 mm); less than 5 percent passing a #200 sieve (less than 0.075 mm); and the sand must not have more than 45 percent of the total passing any one sieve and retained on the next consecutive sieve, of those listed.

Group B: The Coefficient of Uniformity (C_u) must be less than 4; the Coefficient of Curvature (C_c) must be equal to or less than 1; the amount passing the #10 sieve (less than 2.0 mm) must be greater than or equal to 85 percent of the total; the amount passing the #200 sieve (less than 0.075 mm) must be less than 5 percent of the total; and the sand must not have more than 45 percent of the total passing any one sieve and retained on the next consecutive sieve, of those listed in Group A.

(5) for a system with design flows equal to or greater than 2,500 gallons per day, calculations prepared in accordance with standard sanitary engineering principles and practices and sealed by a registered engineer demonstrate that nitrate concentrations in the groundwater aquifer most likely to be affected by the proposed system will not exceed five milligrams per liter, as nitrogen, beyond a distance measured from the edge of the absorption system to the property line of the system site, or to a point that the department identifies as necessary to protect public health, public and private water systems, and the environment;

(6) the soils report complies with 18 AAC 72.265;

(7) areas to be used for initial and replacement soil absorption systems are reserved for that purpose and are shown on the site plan; and

(8) there is adequate depth of burial, mounding above grade, or insulation to protect against frost penetration, with insulation equivalent to that listed for the applicable geographical area in Table A in 18 AAC 72.035(c).

(b) In areas known or suspected to contain permafrost, and as necessary to protect public health, public and private water systems, and the environment, the department will require that plans for a community soil absorption system be sealed by a registered engineer. (Eff. 4/1/99, Register 149)

Authority:	AS 44.46.020	AS 46.03.020	AS 46.03.090
	AS 46.03.010	AS 46.03.050	AS 46.03.720

Editor's note: Examples of ground surface slope, distance to escarpments, and the size of infiltrative surface, as addressed in 18 AAC 72.260(a)(4)(C) and that conform to standard sanitary engineering principles and practices, can be found in the references listed at 18 AAC 72.070(c). To prepare the calculations required under 18 AAC 72.260(a)(5), there are many groundwater modeling references to choose from, including the three listed at 18 AAC 72.070(c)(9), (11), and (14).

18 AAC 72.263. Package plants. The department will approve a package plant if

(1) the submittal requirements of 18 AAC 72.205 are met;

(2) the package plant

(A) can successfully treat domestic wastewater for at least one year under the expected conditions; or

(B) meets or exceeds the certification criteria for package plants set out in *National Sanitation Foundation Standard No. 40*, adopted by reference in 18 AAC 72.070(a)(3); and

(3) the plans are signed and sealed by a registered engineer. (Eff. 4/1/99, Register 149)

Authority:	AS 44.46.020	AS 46.03.020	AS 46.03.090
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AS 46.03.010

AS 46.03.050

AS 46.03.720

18 AAC 72.265. Soils analysis and report. The soils report must meet the following criteria:

(1) test holes and percolation tests must be located and conducted to yield data representative of the initial and replacement soil absorption system;

(2) the number of test holes and percolation tests must be sufficient to adequately evaluate subsurface characteristics of the area planned for the soil absorption system;

(3) soil borings and soil analysis must show that the vertical separations between the lowest part of the system and both the seasonal high water table and the impermeable strata conform to

(A) the provisions of 18 AAC 72.020, if the report is for a conventional soil absorption system; or

(B) Chapter 7 of *the Design Manual: Onsite Wastewater Treatment and Disposal Systems*, adopted by reference at 18 AAC 72.070(a)(4), and Chapter 10 from *A 1979 State of the Art Manual of On-Site Wastewater Management*, adopted by reference at 18 AAC 72.070(a)(2), if the report is for an alternate soil absorption system;

(4) if the water table is encountered in a test hole, the depth to the seasonal high water table must be determined by

(A) monitoring test holes or soil borings taken between June 1 and September 30;

(B) soil mottling analyses;

(C) interpretation of levels of standing open water;

(D) the knowledge and experience of the engineer, based on past subsurface investigative work in the vicinity of the project; or

(E) a combination of these methods;

(5) the depth to seeps, if any, must be provided to the department; as necessary to protect public health, public and private water systems, and the environment, the department will require subsequent monitoring;

(6) the minimum test hole depth must be

(A) six feet below the lowest part of the soil absorption system; and

(B) in areas of known or suspected permafrost, the lesser of

- (i) 20 feet below ground surface; or
 - (ii) the depth at which permafrost or an impermeable layer is encountered;
- (7) soils in the usable wastewater disposal area for a conventional soil absorption system must be shown by a percolation test to have a percolation rate between
 - (A) one and 30 minutes per inch for seepage pits;
 - (B) one and 60 minutes per inch for trenches or beds; or
 - (C) faster than one minute per inch if the department has given its approval on a case-by-case basis under footnote 'b' of Table C at 18 AAC 72.260(a)(4)(D);
- (8) soils in the usable wastewater disposal area for an alternate soil absorption system must be shown by a percolation test to have a percolation rate meeting the recommendations for that type of system found in Chapter 7 of the *Design Manual: Onsite Wastewater Treatment and Disposal Systems*, adopted by reference at 18 AAC 72.070(a)(4);
- (9) percolation tests must be
 - (A) performed by a registered engineer, or a person under the direct supervision of a registered engineer;
 - (B) performed in accordance with applicable procedures contained in Table 3-8 of the *Design Manual: Onsite Wastewater Treatment and Disposal Systems*, adopted by reference at 18 AAC 72.070(a)(4);
 - (C) taken in each soil stratum to be included as infiltrative surface area;
 - (D) provided to the department; and
 - (E) confirmed to be accurate by a correlation of the observed soil texture in the test hole with the range of soil texture types associated with the observed percolation rate in Table C in 18 AAC 72.260(a)(4)(D);
- (10) in areas known or suspected to contain permafrost,
 - (A) a soil moisture content profile analysis derived from laboratory testing methods, and taken from each test hole used for soils testing, must show that the soils are adequately drained throughout the usable wastewater disposal area; and
 - (B) the results of a geotechnical study must show that the area can successfully be used for the system proposed;

(11) the soils report must be sealed by a registered engineer. (Eff.4/1/99, Register 149)

Authority:	AS 44.46.020	AS 46.03.020	AS 46.03.090
	AS 46.03.010	AS 46.03.050	AS 46.03.720

18 AAC 72.270. Collection and pumping systems. The department will approve plans for construction of a collection and pumping system if

- (1) the submittal requirements of 18 AAC 72.205(a) are met;
- (2) the design or design criteria for the following parameters meet the requirements of 18 AAC 72.220:
 - (A) design flows, conduit velocities, and pipe materials;
 - (B) hydraulic grade line considerations associated with pressurized portions of a sewer line;
 - (C) vacuum sewer lift segments;
 - (D) pump station, collection station, or holding tank capacities;
 - (E) overflows, alarms, solids handling, provisions for servicing, and emergency operations;
 - (F) manhole or cleanout placement, and methods for cleaning the collection system;
 - (G) siting with respect to health hazards, nuisance potential, stream crossings, and flooding;
 - (H) bedding and backfill;
 - (I) thermal protection considerations;
- (3) the provisions of 18 AAC 72.245(3) - (7) are met;
- (4) the mean conduit velocity design conforms to 18 AAC 72.040(b)(4), unless a waiver is granted under 18 AAC 72.040(c);
- (5) the system discharges to an approved domestic wastewater treatment works;
- (6) pump stations and collection stations, other than those designed for pumping from individual service connections or onsite septic tanks, are equipped with at least two pumps, each of which pumps flows equal to or in excess of the design flow;
- (7) the size of pipe for sewer lines complies with 18 AAC 72.040(b)(4) unless a

waiver is granted under 18 AAC 72.040(c); and

(8) the collection and pumping system is proposed to discharge to an existing collection or disposal system, and adequate documentation shows that the

(A) receiving system has sufficient capacity to accommodate flows expected from the proposed discharge; and

(B) the owner of the receiving system has approved the discharge.
(Eff.4/1/99, Register 149)

Authority:	AS 44.46.020	AS 46.03.020	AS 46.03.090
	AS 46.03.010	AS 46.03.050	AS 46.03.720

18 AAC 72.275. Disposal systems. (a) The department will approve plans for construction of a marine outfall if

(1) the submittal requirements of 18 AAC 72.205(a) are met;

(2) design or design criteria for the following parameters meet the requirements of 18 AAC 72.220:

(A) design flows, waste loads, and pipe material;

(B) siting with respect to health hazards, nuisance potential, and flooding;

(C) methods to control operational variables;

(D) bedding and backfill;

(E) anchoring systems;

(F) thermal protection considerations;

(3) the provisions of 18 AAC 72.050 are met;

(4) the provisions of 18 AAC 72.245(3) - (7) are met;

(5) the materials, methods, and techniques used to install and secure the outfall line prevent structural damage to or movement of the outfall as a result of wave action within the surf zone, storms, beach logs, ice, settling, or current;

(6) mixing and dilution calculations show that for the outfall line chosen, the line's length, grade, orifice size and numbers, depth, and distance out from shore provide for effluent dispersion and dilution sufficient to meet permit terms and conditions and to otherwise comply with AS 46.03, this chapter, and 18 AAC 70;

(7) for a gravity sewer extending into the receiving waters, a manhole or clean-out exists at the shore end to allow access for maintenance;

(8) the plans contain a provision to sample the effluent before the effluent mixes with the receiving waters; and

(9) the effluent does not threaten an aquatic farm or a commercial or subsistence shellfish harvest area.

(b) The department will approve plans for the construction of a land surface disposal system if

(1) the submittal requirements of 18 AAC 72.205(a) and (f) are met;

(2) design or design criteria for the following parameters meet the requirements of 18 AAC 72.220:

(A) design flows, waste loads, and pipe material;

(B) siting with respect to potential for health hazards, nuisances, flooding, or effect on groundwater;

(C) assimilative capacity of the soil and associated flora, and the ultimate fate of affected groundwater or surface water;

(D) methods to control operational variables;

(E) thermal protection considerations;

(3) the provisions of 18 AAC 72.245(3) - (7) are met;

(4) the applicable provisions of 18 AAC 72.050 are met;

(5) the person discharging domestic wastewater onto the land

(A) owns the land treatment area; or

(B) has written authorization from the landowner to discharge domestic wastewater onto the land;

(6) the land treatment area is protected against public access;

(7) the topography, hydrology, geology, and soil characteristics of the land treatment area are adequate to protect existing and potential water and land uses outside the land treatment area, including subsistence, housing, education, industry, recreation, and agriculture; and

(8) the method of discharge prevents transmission of disease.

(c) The department will consider other means of final disposal on a case-by-case basis for whether they are protective of public health, public and private water systems, and the environment. (Eff. 4/1/99, Register 149)

Authority:	AS 44.46.020	AS 46.03.020	AS 46.03.090
	AS 46.03.010	AS 46.03.050	AS 46.03.720

18 AAC 72.280. Delegation of domestic wastewater system plan review. (a) Except as provided in (i) of this section, the department will, in its discretion, delegate the authority to implement 18 AAC 72.005 – 18 AAC 72.280 to a municipality upon approval of an application for delegation.

(b) A municipality must submit an application for delegation to the director. The application must include the following information:

(1) a copy of the municipality's ordinances governing the subject matter of the proposed delegation;

(2) a description of pertinent enforcement processes, available to the municipality administratively and through initiation of court action, to ensure compliance with AS 46.03, this chapter, and the municipality's ordinances;

(3) a description of administrative organization, staff, funding levels, and other resources that are available to the municipality to administer and enforce the municipality's requirements.

(4) information about the existence of insurance to cover personal injury and property damage;

(5) other information that the director considers necessary to the department's decision whether to delegate the department's authority.

(c) Within 90 days after receipt of a complete application for delegation, the department will, in its discretion, delegate the authority to implement 18 AAC 72.005 – 18 AAC 72.275 to a municipality if the department finds, after review of information submitted under (b) of this section and with respect to the subject matter of the proposed delegation, that

(1) the municipality's ordinances are at least as stringent as the requirements of AS 46.03 and this chapter;

(2) the municipality has sufficient resources and enforcement authorities to ensure uniform compliance with the requirements of AS 46.03 and this chapter; and

(3) the state is adequately protected from liability.

(d) For a delegation that the department has approved under (c) of this section to be valid, the director and the individual with administrative management authority for the

municipality must sign the delegation. The delegation must include, at a minimum, terms and conditions that set out the following:

- (1) the right of the department periodically to audit the municipality to ensure compliance with the terms and conditions of the delegation;
- (2) the right of the department and the municipality to review and comment on proposed changes to regulations or ordinances addressing the subject matter of the delegation;
- (3) the right of the department to require an annual report from the municipality summarizing the domestic wastewater systems that the municipality approved or inspected;
- (4) the requirement that the municipality enforce the municipality's ordinances and that the ordinances be at least as stringent as the requirements of AS 46.03 and this chapter;
- (5) indemnification of the state against liability, losses, or damages arising out of or in any manner connected with the department's delegation under this section; and
- (6) the right of the department to terminate the delegation if the department determines

(A) a threat to public health, public and private water systems, or the environment; or

(B) that the delegation is not in the public interest.

(e) If the department determines, based on an audit conducted under (d) of this section or other information, that the municipality is not in compliance with the terms and conditions of the delegation, with AS 46.03, or with this chapter, the department will

(1) notify the municipality in writing of

(A) the areas in which the department has determined that the municipality is failing to comply; and

(B) the reasons for the department's determination;

(2) provide the municipality 30 days after receiving the notification under (1) of this subsection to

(A) explain why the municipality disagrees with the department's determination; or

(B) outline the steps that the municipality is taking or proposes to take to correct the areas of noncompliance.

(f) After reviewing the information received under (e) of this section, the department will, in its discretion,

(1) revoke the delegation, if the department finds that the municipality is not in compliance with the terms and conditions of the delegation, with AS 46.03, or with this chapter, and that the municipality is not likely to come into compliance;

(2) periodically review the actions of the municipality until compliance is achieved, if the department finds that the municipality is not in compliance with the terms and conditions of the delegation, with AS 46.03, or with this chapter, but that the municipality is taking sufficient steps to come into compliance; or

(3) modify the delegation as necessary to protect public health, public and private water systems, and the environment.

(g) If the department modifies or revokes a delegation under this section, the department will send a notice to the municipality stating that, based on the department's written findings,

(1) the delegation will be revoked or modified effective immediately, unless the notice gives a specific date on which the revocation or modification becomes effective; and

(2) the municipality may not continue to enforce its authority after the effective date of the revocation or modification.

(h) A municipality may not further delegate a delegation under this section.

(i) A delegation under this section does not include the issuance of permits under 18 AAC 72.215. A municipality with a delegation under this section is not required to charge a fee listed under 18 AAC 72.955.

(j) A delegation is effective upon signing under (d) of this section by both the director and the individual with administrative management authority for the municipality. (Eff. 4/1/99, Register 149, am 1/17/2002, Register 161)

Authority: AS 44.46.020 AS 46.03.050 AS 46.03.090
AS 46.03.020

Article 3. Repealed

Section

299. (Repealed)
300. (Repealed)
310. (Repealed)
315. (Repealed)
320. (Repealed)
325. (Repealed)
330. (Repealed)
335. (Repealed)
340. (Repealed)
345. (Repealed)
350. (Repealed)
355. (Repealed)
360. (Repealed)
370. (Repealed)
375. (Repealed)
380. (Repealed)
385. (Repealed)

18 AAC 72.299. Temporary suspension of 18 AAC 72.300 - 18 AAC 72.385.

Repealed. (Eff. 11/27/96, Register 140; am 8/21/97, Register 143; repealed 7/10/98, Register 147)

18 AAC 72.300. Application for department approval.

Repealed. (Eff. 6/30/90, Register 114; repealed 7/10/98, Register 147)

18 AAC 72.310. Preapplication conference.

Repealed. (Eff. 6/30/90, Register 114; repealed 7/10/98, Register 147)

18 AAC 72.315. Submittal requirements.

Repealed. (Eff. 6/30/90, Register 114; repealed 7/10/98, Register 147)

18 AAC 72.320. Approval of subdivisions not requiring review.

Repealed. (Eff. 6/30/90, Register 114; repealed 7/10/98, Register 147)

18 AAC 72.325. Abbreviated reviews.

Repealed. (Eff. 6/30/90, Register 114; repealed 7/10/98, Register 147)

18 AAC 72.330. Conventional onsite soil absorption systems.

Repealed. (Eff. 6/30/90, Register 114; repealed 7/10/98, Register 147)

18 AAC 72.335. Soils analysis and report.

Repealed. (Eff. 6/30/90, Register 114; repealed 7/10/98, Register 147)

18 AAC 72.340. Alternate onsite wastewater treatment and disposal. Repealed. (Eff. 6/30/90, Register 114; repealed 7/10/98, Register 147)

18 AAC 72.345. Onsite treatment systems with individual marine outfalls. Repealed. (Eff. 6/30/90, Register 114; repealed 7/10/98, Register 147)

18 AAC 72.350. Construction of a collector sewer or collector system, a collector sewer or collector system and treatment/disposal system, or individual lot treatment systems. Repealed. (Eff. 6/30/90, Register 114; repealed 7/10/98, Register 147)

18 AAC 72.355. Connection to an existing system. Repealed. (Eff. 6/30/90, Register 114; repealed 7/10/98, Register 147)

18 AAC 72.360. Subdivisions with no wastewater disposal. Repealed. (Eff. 6/30/90, Register 114; repealed 7/10/98, Register 147)

18 AAC 72.370. Plat notes required. Repealed. (Eff. 6/30/90, Register 114; repealed 7/10/98, Register 147)

18 AAC 72.375. Pollution abatement report. Repealed. (Eff. 6/30/90, Register 114; repealed 7/10/98, Register 147)

18 AAC 72.380. Final plat review. Repealed. (Eff. 6/30/90, Register 114; repealed 7/10/98, Register 147)

18 AAC 72.385. Delegation of subdivision plan review. Repealed. (Eff. 6/30/90, Register 114; repealed 7/10/98, Register 147)

Article 4. Certified Installer Program.**Section**

- 400. General provisions
- 405. Certification of installers
- 410. Approval of homeowners
- 415. Training and examination requirements
- 420. Certification term
- 425. Certification renewal
- 430. Revocation of certification
- 435. Installation notification and inspection
- 440. Fees

18 AAC 72.400. General provisions. Except as otherwise provided in 18 AAC 72.015(b), a person may not install or modify a conventional onsite system unless that person is certified under 18 AAC 72.405 or approved under 18 AAC 72.410. (Eff. 4/1/99, Register 149)

Authority:	AS 44.46.020	AS 46.03.070	AS 46.03.100
	AS 46.03.050	AS 46.03.080	AS 46.03.720

18 AAC 72.405. Certification of installers. (a) The department will certify a person for the installation of conventional onsite systems serving a single-family home, duplex, or a small commercial facility, if

(1) the systems that the person intends to install are designed exclusively for domestic wastewater treatment and disposal;

(2) the person is

(A) a contractor who has a valid license, issued under AS 08.18 and 12 AAC 21, to work as a general contractor or as one of the following specialty contractors:

(i) an excavation contractor as described in 12 AAC 21.330;

(ii) a water and sewer contractor, as described in 12 AAC 21.540;

(B) an employee of a contractor described in (A) of this paragraph, and the employee submits to the department

(i) a letter signed by the contractor stating that the person is authorized to work under that contractor's license; and

(ii) a copy of the contractor's license;

(3) the person meets the training and examination requirements of 18 AAC 72.415; and

(4) the person pays the certification fee under 18 AAC 72.440(a).

(b) The department will issue a numbered certificate to a person certified under this chapter.

(c) The department will waive the requirements of (a)(2) of this section and 18 AAC 72.415(b)(1) if

(1) the department determines that public health, public and private water systems, and the environment are adequately protected; and

(2) the individual applying for certification

(A) is employed by a government or health corporation; and

(B) provides documentation to the department of employment described in (a) of this paragraph.

(d) As the department determines necessary in order to adequately protect public health, public and private water systems, and the environment under (c)(1) of this section, the department will

(1) restrict the type of installation or modification that can be done by a certified installer;

(2) restrict the geographical location where a system may be installed by a certified installer; or

(3) place other restrictions the department considers necessary to protect public health, public and private water systems, and the environment. (Eff. 4/1/99, Register 149, am 1/17/2002, Register 161)

Authority:	AS 44.46.020	AS 46.03.050	AS 46.03.100
	AS 44.46.025	AS 46.03.070	AS 46.03.720
	AS 46.03.020	AS 46.03.080	

18 AAC 72.410. Approval of homeowners. (a) The department will issue an approval for a homeowner to install or modify a conventional onsite system to serve that individual's owner-occupied single-family home or owner-occupied duplex if the homeowner meets the requirements of this section.

(b) To be approved, a homeowner must attend the department's training course provided under 18 AAC 72.415(a), but is not required to take the examination.

(c) Before attending the department's training course provided under 18 AAC 72.415, a homeowner who seeks to be approved under this section must submit to the department

(1) a completed application for attendance in the training program on a form supplied by the department; and

(2) the training course fee required by 18 AAC 72.440(c).

(d) Before installing a conventional onsite system, an approved homeowner shall properly size the soil absorption field by

(1) collecting a soil sample from the soil strata in which the absorption field will be installed and having a registered engineer or a soils laboratory perform a sieve analysis on the collected sample; or

(2) having a registered engineer rate the soils on site.

(e) An approved homeowner shall comply with the notice requirements of 18 AAC 72.435.

(f) Approval of a homeowner to install a conventional onsite system under this section is limited to one system within a one-year period, beginning on the date the homeowner attends the department's training course. (Eff. 4/1/99, Register 149)

Authority:	AS 44.46.020	AS 46.03.050	AS 46.03.100
	AS 46.46.025	AS 46.03.070	AS 46.03.720
	AS 46.03.020	AS 46.03.080	

18 AAC 72.415. Training and examination requirements. (a) A person seeking certification under 18 AAC 72.400 - 18 AAC 72.440 shall attend a conventional onsite systems training program that

(1) the department provides or sponsors; and

(2) consists of a training course and a written examination.

(b) Before participating in the training program under (a) of this section, a person who seeks to be certified as an installer of a conventional onsite system shall submit to the department

(1) a copy of

(A) the applicant's general or specialty contractor's license as described in 18 AAC 72.405(a)(2); or

(B) the employer's general or specialty contractor's license as described in 18 AAC 72.405(a)(2), and a letter from the employer stating that the applicant is authorized to work under the contractor's license;

(2) a completed application for attendance in the training program on a form supplied by the department; and

(3) the training course fee required by 18 AAC 72.440(a).

(c) Examinations will be graded by the department or its designee. The department will notify the applicant of the results within 30 days after the examination. (Eff.4/1/99, Register 149)

Authority:	AS 44.46.020	AS 46.03.050	AS 46.03.100
	AS 44.46.025	AS 46.03.070	AS 46.03.720
	AS 46.03.020	AS 46.03.080	

18 AAC 72.420. Certification term. Except as provided in 18 AAC 72.440(b), or unless revoked under 18 AAC 72.430, a certification under 18 AAC 72.405 is valid for two years after the date of the training. (Eff. 4/1/99, Register 149)

Authority:	AS 44.46.020	AS 46.03.070	AS 46.03.100
	AS 46.03.020	AS 46.03.080	AS 46.03.720
	AS 46.03.050		

18 AAC 72.425. Certification renewal. (a) A person who seeks to renew a certification under 18 AAC 72.400 - 18 AAC 72.440 must meet the requirements of 18 AAC 72.405.

(b) The department will exempt a person seeking certification renewal from the written examination under 18 AAC 72.415 if the department has inspected at least one installation by that person each year and found that the installation meets the requirements of AS 46.03 and this chapter.

(c) If a certification will expire before the next training course is offered, the department will extend certification to the date of the next training course offered nearest the certified installer's residence or usual area of work. (Eff.4/1/99, Register 149)

Authority:	AS 44.46.020	AS 46.03.070	AS 46.03.100
	AS 46.03.020	AS 46.03.080	AS 46.03.720
	AS 46.03.050		

18 AAC 72.430. Revocation of certification. (a) The department will, in its discretion, revoke a certification issued under 18 AAC 72.405 if the department finds that

- (1) fraud or deceit was used to obtain certification; or
- (2) the certified installer violated a requirement of AS 46.03 or this chapter.

(b) If the department proposes to revoke a certification under this section, the department will send the certified installer a notice that states

- (1) the grounds for revocation;
- (2) that the revocation is effective 30 days from the date of the notice, unless a hearing is requested to review the decision to revoke;

(3) that the installer may not continue to perform installations under AS 46.03 and this chapter after the effective date of the revocation;

(4) that the installer may appeal the revocation decision by requesting a hearing under this section within 10 days after receiving the notice; and

(5) that a hearing, if requested, will be held within 10 days after the department receives a request for hearing unless the commissioner grants an extension for good cause shown.

(c) A request for hearing under this section must be sent to the commissioner and include

(1) the installer's name, certification number, mailing address, telephone number, and facsimile number, if available;

(2) a description of the revocation decision being appealed;

(3) a clear and concise statement of the reason for the appeal, including a statement of the nature and scope of the installer's disagreement with the decision; and

(4) other information that the installer believes would assist the department in reviewing the revocation decision.

(d) The commissioner, or an impartial department employee whom the commissioner designates, will conduct the hearing according to the procedures in (e) - (g) of this section.

(e) The commissioner or the commissioner's designee will

(1) prescribe the sequence of presentation;

(2) admit material evidence of the type on which a reasonable person might rely in the conduct of serious business affairs, including evidence that was not before the department when it decided to revoke certification;

(3) refuse to admit evidence that is unduly repetitious; and

(4) order the submission of briefs if the commissioner or the commissioner's designee finds that briefing might aid in resolving the appeal.

(f) The burden of proof and of going forward with the evidence is on the department.

(g) After a hearing under this section, the commissioner or the commissioner's designee will issue findings of fact and conclusions of law and will affirm, modify, or set aside the revocation. A decision issued under this subsection is the final decision of the department and may be appealed to the superior court as provided in the Alaska Rules of Appellate Procedure. The decision is effective immediately unless stayed by the commissioner or the court.

(h) An installer whose certificate has been revoked may reapply for certification

(1) one year after the effective date of an initial revocation;

(2) for a subsequent revocation, at least one year after the effective date of the most recent revocation, on a date determined by the department, taking into account the relative seriousness or frequency of the installer's conduct that warranted the revocations. (Eff.4/1/99, Register 149)

Authority:	AS 44.46.020	AS 46.03.070	AS 46.03.720
	AS 46.03.020	AS 46.03.080	AS 46.35.090(e)
	AS 46.03.050	AS 46.03.100	

18 AAC 72.435. Installation notification and inspection. (a) Except as provided in (c) of this section a certified installer or approved homeowner shall notify the department office identified in (e) of this section at least 24 hours before beginning construction or modification of a conventional onsite system.

(b) The notification must include

(1) the legal description and location of the property where the installation or modification will occur, including directions to assist the department in finding it;

(2) the certified installer's or approved homeowner's name and telephone number, and, if applicable, the installer's certification number and the contractor's name and license number; and

(3) the scheduled date of the installation or modification.

(c) If a certified installer or approved homeowner is unable to

(1) provide the notice within the time required by (a) of this section for reasons beyond the control of the certified installer or approved homeowner, that person shall notify the department as soon as possible, but before beginning installation or modification; or

(2) install or modify on the date noticed under (b)(3) of this section, the certified installer or approved homeowner shall notify the department of the new scheduled date as soon as possible, but in any case before beginning construction or modification.

(d) The department will, in its discretion, conduct an inspection of an installation or modification.

(e) Notice of installation shall be given at the department office that is nearest to the worksite. (Eff.4/1/99, Register 149)

Authority:	AS 44.46.020	AS 46.03.070	AS 46.03.100
	AS 46.03.020	AS 46.03.080	AS 46.03.720
	AS 46.03.050		

Editor's note: For purposes of providing notice of installation as required under 18 AAC 72.435(e), department offices are located in Anchorage, Fairbanks, Juneau, Ketchikan, Soldotna, and Wasilla.

18 AAC 72.440. Fees. (a) A person who seeks to be certified or recertified under 18 AAC 72.400 - 18 AAC 72.440 must pay to the department

(1) a training course fee of \$65; and

(2) if that person successfully passes the examination, a certification fee of \$625.

(b) The certification fee under (a)(2) of this section may be paid in two annual installments of \$340. However, if the certified installer fails to pay the second installment when it is due, certification automatically expires on the date that payment is due, without further notice from the department.

(c) A homeowner who seeks to be approved under 18 AAC 72.410 shall pay to the department a training course fee of \$65. (Eff.4/1/99, Register 149)

Authority:	AS 44.46.020	AS 46.03.050	AS 46.03.100
	AS 44.46.025	AS 46.03.070	AS 46.03.720
	AS 46.03.020	AS 46.03.080	

Article 5. Nondomestic Wastewater

Section

500. Restrictions

510. Sludge disposal

18 AAC 72.500. Permit required. (a) In addition to the plan approval required by 18 AAC 72.600, a person who disposes of nondomestic wastewater into or onto land, surface water, or groundwater in this state must have a permit issued by the department for that disposal.

(b) If the department determines that public health, public and private water systems, and the environment are adequately protected, and at the request of the applicant, the department will issue a project-wide permit to a person who plans to conduct an operation with the same disposal characteristics at various discharge locations. As the department determines necessary to ensure compliance with this chapter and adequately protect public health, public and private water systems, and the environment, the department will

(1) require the submission of site-specific information, including plans, a schedule, and a description of all planned discharge activities, for approval as a condition of the project-wide permit; and

(2) restrict the project-wide permit to certain proposed discharge activities.

(c) The applicant for or recipient of a permit or authorization shall pay any fee for the permit or authorization as required by 18 AAC 72.956, 18 AAC 72.957, or 18 AAC 72.959, as applicable. (Eff. 6/30/90, Register 114, am 1/17/2002, Register 161)

Authority:	AS 44.46.020	AS 46.03.050	AS 46.03.900
	AS 44.46.025	AS 46.03.100	
	AS 46.03.020		

18 AAC 72.510. Sludge disposal. A person may dispose of sludge resulting from a manufacturing or production process or from a nondomestic wastewater treatment works only at a site or facility with a waste disposal permit issued by the department for that disposal. The department will require that the sludge be treated before disposal if necessary to protect public health or the environment. (Eff. 6/30/90, Register 114)

Authority:	AS 44.46.020	AS 46.03.050	AS 46.03.710
	AS 46.03.020	AS 46.03.100	

Article 6. Nondomestic Wastewater System Plan Review**Section**

600. Application for department approval

610. (Repealed)

18 AAC 72.600. Application for department approval. (a) A person who constructs, alters, installs, modifies, or operates any part of a nondomestic wastewater treatment works or disposal system must first have written department approval of engineering plans submitted under this section.

(b) If construction, alteration, installation, modification, or operation has not begun within two years after issuance of plan approval, the approval is void, and plans must be resubmitted to the department for review and approval.

(c) Engineering plans required by (a) of this section must include

(1) the location of proposed or existing improvements, wastewater treatment works and disposal systems, sewers, drinking water supply lines, drinking water sources, and waters in the vicinity of the proposed system;

(2) detailed flow diagrams showing the physical and chemical composition and amount of each nondomestic wastewater disposal;

(3) a statement identifying persons who will own, operate, and maintain the proposed system;

(4) a description and timetable of the proposed construction or other activity;

(5) information on sludge handling and disposal from the proposed treatment works; and

(6) other information the department requires to assess compliance with this chapter.

(d) As the department determines necessary to ensure compliance with this chapter and adequately protect public health, public and private water systems, and the environment, the department will attach terms and conditions, including monitoring, sampling, and reporting conditions, to submitted plans.

(e) An accurate and complete set of as-built drawings for nondomestic wastewater treatment works and disposal systems with a discharge greater than 10,000 gallons per day must be submitted to the department within 90 days after the project's startup date. The department will, in its discretion, waive this requirement if, after an onsite inspection, it finds that the system was built as approved. (Eff. 6/30/90, Register 114, am 1/17/2002, Register 161)

AS 46.03.010
AS 46.03.020

AS 46.03.090

AS 46.03.720

18 AAC 72.610. Plan review and permit fees. Repealed (Eff. 2/19/93, Register 125; am 11/10/94, Register 132, repealed 1/17/2002, Register 161)

Editor's note: The plan review and permit fees that were located in 18 AAC 72.610 are now located in 18 AAC 72.955, 18 AAC 72.956, 18 AAC 72.957, and 18 AAC 72.959.

Article 7. General Provisions.**Section**

- 900. General permit
- 910. Procedures for general permit
- 920. Professional submittals
- 930. Reports
- 940. Emergency notice
- 945. Inspection fee
- 946. Inspection fee waiver
- 950. (Repealed)
- 955. Plan review fees
- 956. General permit fees
- 957. Individual permit fees
- 959. Hourly and negotiated fees
- 960. Appeals
- 961. Fee determination or computation appeals
- 990. Definitions

18 AAC 72.900. General permit. (a) The department will, in its discretion, and on its own motion or upon application by any person, issue a general permit for activities that produce wastewater and that

- (1) require a permit under 18 AAC 72.010 or 18 AAC 72.500;
- (2) involve the same or very similar type of operation;
- (3) discharge the same type of wastewater;
- (4) require the same effluent limitation or operating conditions, or similar monitoring requirements;
- (5) will not threaten public health or water quality; and
- (6) in the department's opinion are better controlled under a general permit.

(b) A general permit will apply to a class of disposal activities discharging within a specified area. The area will correspond to geographic or political boundaries such as

- (1) municipal boundaries;
- (2) water bodies or drainages; or
- (3) any other appropriate geographic division or combination of boundaries.

(c) A general permit will define the covered disposal activities by identifying the

- (1) class of disposal activities;
- (2) duration, frequency, and amount of disposal;
- (3) physical and chemical characteristics of disposal;
- (4) location and method of disposal;
- (5) treatment required before disposal;
- (6) water and land areas able to receive the disposal; and
- (7) any other factors that the department determines are important in granting a general permit.

(d) The department will include appropriate conditions in each general permit.

(e) The department will, in its discretion, require applicants to have written approval before conducting particular disposal activities under a general permit. (Eff. 6/30/90, Register 114)

Authority:	AS 44.46.020	AS 46.03.050	AS 46.03.110
	AS 46.03.020	AS 46.03.100	AS 46.03.720

18 AAC 72.910. Procedures for general permit. (a) An application for authorization to operate under a general permit must be made in accordance with AS 46.03.110 and 18 AAC 15 and using forms provided by the department.

(b) If the department proposes a general permit, it will publish notice of the proposed permit in two issues of a newspaper of general circulation in the area where the disposal is to take place and in other media as the department considers appropriate. In the notice, the department will summarize the proposed permit, explain the type of discharge to be allowed and any geographical restrictions on where the permit can be used, and state where copies of the proposed permit and supporting documents may be obtained. The department will maintain a mailing list of individuals wishing to receive copies of public notices.

(c) The department may modify, revoke, reissue, or terminate a general permit in accordance with AS 46.03, 18 AAC 15, and this chapter. The department will require a person with a general permit authorization to obtain an individual permit if the department determines that

(1) the disposal does not meet the requirements for a general permit as set out in 18 AAC 72.900;

(2) the disposal contributes to pollution or causes an adverse impact on public health or water quality;

(3) a change has occurred in the availability of technology or practices for the control or abatement of pollution contained in the disposal; or

(4) public health, public and private water systems, and the environment are not adequately protected

(d) An applicant who seeks an authorization to operate under a National Pollutant Discharge Elimination System general permit under 33 U.S.C. 1342 (Clean Water Act, sec. 402) that has been certified by the department under 33 U.S.C. 1341 (Clean Water Act, sec. 401), or who seeks an authorization to operate under a general permit issued by the department, shall pay the appropriate fee listed in 18 AAC 72.956(a) or if the discharge is not listed in 18 AAC 72.956(a), shall pay a fee under 18 AAC 959 for the authorization to operate under that general permit.. (Eff. 6/30/90, Register 114; am 2/19/93, Register 125; am 11/10/94, Register 132, am 1/17/2002, Register 161)

Authority:	AS 44.46.020	AS 46.03.070	AS 46.03.100
	AS 44.46.025	AS 46.03.080	AS 46.03.110
	AS 46.03.020	AS 46.03.090	AS 46.03.720
	AS 46.03.050		

18 AAC 72.920. Professional submittals. Information required to be submitted by a registered engineer or land surveyor under this chapter must bear the signature and the Alaska registration seal, or the signature and Alaska registration number, of that professional. (Eff. 6/30/90, Register 114)

Authority:	AS 44.46.020	AS 46.03.050	AS 46.03.090
	AS 46.03.020		

18 AAC 72.930. Reports. As the department determines necessary in order to adequately protect public health, public and private water systems, and the environment, the department will require that a person who owns or operates a domestic or a nondomestic wastewater treatment works or disposal system routinely submit operational reports on forms provided or approved by the department. (Eff. 6/30/90, Register 114, am 1/17/2002, Register 161)

Authority:	AS 44.46.020	AS 46.03.020	AS 46.03.050
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18 AAC 72.940. Emergency notice. (a) Except as provided in (c) of this section, the owner or operator of a domestic or nondomestic wastewater collection, treatment, or disposal system, shall report to the department within 24 hours, or as soon after that as possible, if

(1) the system is out of operation for more than six hours and results in inadequate treatment in violation of permit conditions;

(2) an accident, spill, or other event occurs that results in inadequate treatment in violation of permit conditions, or threatens public health or water quality;

- (3) the treatment works floods;
- (4) a sludge carry-over, washout, or overflow occurs;
- (5) any part of the treatment works is by-passed during periods of high flow or equipment breakdown; or
- (6) the discharge threatens public health or water quality.

(b) A follow-up written report must be sent to the department within seven days after any event described in (a) of this section, and must contain

- (1) the times and dates of the event;
- (2) a detailed description of the event, including amounts of wastewater involved;
- (3) details of any observed or potential impact to public health or receiving waters; and
- (4) description of actions taken to correct the cause of the event.

(c) This section does not apply to an onsite domestic wastewater system serving a single-family home or a duplex. (Eff. 6/30/90, Register 114; am 4/1/99, Register 149)

Authority: AS 44.46.020 AS 46.03.050 AS 46.03.710
AS 46.03.020

18 AAC 72.945. Inspection fee. Except for a domestic wastewater inspection conducted under 18 AAC 72.435, the owner or operator shall pay to the department a fee of \$43 per hour for an inspection under this chapter, if the department performs that inspection. (Eff. 11/10/94, Register 132; 4/1/99, Register 149, am 1/17/2002, Register 161)

Authority: AS 37.10.052 AS 46.03.050 AS 46.03.100
AS 44.46.020 AS 46.03.070 AS 46.03.110
AS 44.46.025 AS 46.03.080 AS 46.03.720
AS 46.03.020 AS 46.03.090

18 AAC 72.946. Inspection fee waiver. (a) The department may waive a fee for an inspection under this chapter if the department finds

- (1) after conducting an inspection in response to a complaint, that the complaint was unfounded;
- (2) that a public health or environmental emergency exists, and that an inspection at no cost to the permittee is needed to meet the emergency;

(3) that an inspection is necessary to prevent a public health or environmental emergency, and that charging a fee for that inspection would not be in the public interest; or

(4) that the cost of the inspection is covered by the fees in 18 AAC 72.956 or 18 AAC 72.957.

(b) A circumstance listed in (a) of this section does not constitute an automatic fee waiver. (Eff. 11/10/94, Register 132; am 4/1/99, Register 149, am 1/17/2002, Register 161)

Authority:	AS 44.46.020	AS 46.03.070	AS 46.03.100
	AS 44.46.025	AS 46.03.080	AS 46.03.110
	AS 46.03.020	AS 46.03.090	AS 46.03.720
	AS 46.03.050		

18 AAC 72.950. Reference materials. Repealed. (Eff. 6/30/90, Register 114; repealed 4/1/99, Register 149)

Authority:	AS 44.46.020	AS 46.03.050	AS 46.03.090
	AS 46.03.020		

Editor's note: Effective 4/1/99, Register 149, the substance of 18 AAC 72.950 was relocated to 18 AAC 72.070. The history note at 18 AAC 72.070 does not reflect the history of 18 AAC 72.950.

18 AAC 72.955. Plan review fees. (a) In order to obtain a plan review under 18 AAC 72.220 or 18 AAC 72.600, or to obtain review of a stormwater pollution prevention plan submitted in accordance with a nationwide general permit issued under 33 U.S.C. 1342(p) (Clean Water Act, sec 402(p)), an applicant must pay the fees listed in Table D of this subsection with the submittal of the plans:

TABLE D. PLAN REVIEW FEES

(1) Domestic wastewater system with a daily peak capacity measurement, in gpd,¹ of		Fee (in dollars)
(A) 0-500		270
(B) 501-1,500		340
(C) 1,501-2,500		360
(D) 2,501 - 15,000		730
(E) 15,001 -50,000		1,200
(F) 50,001 - 100,000		2,370
(G) 100,001 - 250,000		2,960
(H) 250,001 and over		3,510
(2) Modification to an existing or approved domestic wastewater system that increases daily peak capacity by		
(A) less than 20%	20% of the fee applicable to the pre-modification daily peak capacity measurement	
(B) at least 20% but less than 50%	a percentage of the fee applicable to the pre-modification daily peak capacity measurement, with the amount of that percentage to be equal to the percentage increase in capacity	
(C) 50% or more	100% of the fee applicable to the pre-modification daily peak capacity measurement	
(3) Waivers or modifications under 18 AAC 72.060		
(A) Any number of waivers or modifications that the department considers under one plan review under this chapter for a single-family home or a duplex	300, regardless of number of waivers or modifications	
(B) Each waiver or modification that the department considers under one plan review under this chapter for a project other than a single-family home or duplex	250 per waiver or modification	
(4) Nondomestic wastewater systems for discharges that do not include stormwater runoff		
(A) Passive treatment ²		
(i) for one or two treatment methods		440
(ii) for each additional passive treatment method above two		90
(B) Complex treatment ³		
(i) for one or two treatment methods		940
(ii) for each additional treatment method above two		190

(5) Nondomestic wastewater systems for discharges that include stormwater runoff	
(A) For engineering plans required by 18 AAC 72.600(a) for projects	
(i) of less than one acre	100
(ii) that are at least one acre but less than five acres	300
(iii) that are at least five acres but less than 20 acres	600
(iv) that are 20 acres or more	1,000
(B) For a construction stormwater pollution prevention plan review, as required by a nationwide general permit issued under 33 U.S.C. 1342(p) (Clean Water Act, sec. 402(p))	400
(C) For an industrial stormwater pollution prevention plan review, as required by a nationwide general permit issued under 33 U.S.C. 1342(p) (Clean Water Act, sec. 402(p)), for a facility with	
(i) fewer than 10 employees	150
(ii) 10 to 49 employees	300
(iii) 50 or more employees	500
(6) Domestic and nondomestic sewer main extensions or replacements	
(A) up to 1,000 feet	310
(B) for each additional 1,000 feet, or fraction of that amount, over the first 1,000 feet	160

Notes to Table D:

¹ If the domestic wastewater system is a waste stabilization pond that discharges seasonally, the department will consider the gpd measurement, for purposes of determining the amount of the fee, to be the total discharge into the stabilization pond in a calendar year, divided by 365.

² “Passive treatment” means physical treatment with no chemical additions; “passive treatment” includes check dams, sediment lagoons, ion exchange water softeners, cartridge filters, and ultraviolet disinfection.

³ “Complex treatment” means biological, chemical, or physical treatment with chemical additives.

(b) A fee required under (a) of this section is not refundable.

(c) Except for fee requirements listed in (a)(5) of this section for stormwater runoff or stormwater pollution plan reviews, the fee requirements of this section do not apply to a charitable organization that is exempt from taxation under 26 U.S.C. 501(c)(3). (Eff. 1/17/2002, Register 161)

Authority:	AS 37.10.052	AS 46.03.020	AS 46.03.100
	AS 44.46.020	AS 46.03.050	AS 46.03.720
	AS 44.46.025	AS 46.03.080	

18 AAC 72.956. General permit authorization fees. (a) An applicant must pay the appropriate fee as listed in Table E of this subsection for authorization to operate under an existing general permit issued under 18 AAC 72.900, or authorization to operate under a general permit issued under 33 U.S.C. 1342 (Clean Water Act, sec. 402) that has been certified by the department under 33 U.S.C. 1341 (Clean Water Act, sec 401):

TABLE E. GENERAL PERMIT AUTHORIZATION FEES ¹

	Unexpired facility authorization issued before January 17, 2002	Discharge to surface water	Discharge to land or groundwater	Facility not in operation²
(1) Annual fee for a domestic wastewater system with a daily peak capacity measurement, in gpd³ of				
(A) 0-1,500	150	230	230	80
(B) 1,501-15,000 ⁴	400 ⁵	550	230	150 ⁶
(C) 15,001 –250,000 ⁴	500 ⁵	700	230	200 ⁶
(2) Annual Fee for an agricultural activity that consists of a feedlot⁷	-- ⁸	-- ⁸	230	-- ⁸
(3) One-time fee for a construction activity that consists of excavation dewatering				
(A) more than one mile from groundwater that does not meet water quality standards in 18 AAC 70	-- ⁸	300	150	-- ⁸
(B) one mile or less from groundwater that does not meet water quality standards in 18 AAC 70 ⁷	-- ⁸	1,240	150	-- ⁸
(4) One-time fee for hydrostatic test dewatering up to 1,000,000 gpd, with water				
(A) not containing chlorine or other toxic substances	-- ⁸	300	150	-- ⁸
(B) containing chlorine or other toxic substances ⁷	-- ⁸	1,240	190	-- ⁸
(5) Annual fee for fish hatcheries with a food budget more than 30,000 pounds per year⁷	250	390	-- ⁸	140

	Unexpired facility authorization issued before January 17, 2002	Discharge to surface water	Discharge to land or groundwater	Facility not in operation ²
(6) Annual fee for log transfer facilities				
(A) New site ⁷	410	750	-- ⁸	340
(B) Existing log transfer facility with more than one acre of continuous bark coverage on the ocean floor ⁷	410	750	-- ⁸	340
(C) Existing log transfer facility with one acre or less of continuous bark coverage on the ocean floor ⁷	250	470	-- ⁸	220
(7) Annual fee for mineral mining activities				
(A) Mechanical placer mining				
(i) without a mixing zone authorized under 18 AAC 70.240	0	0	0	0
(ii) with a mixing zone authorized under 18 AAC 70.240 ⁷	120	150	0	30
(B) Mineral mining using a suction dredge with a nozzle less than or equal to 10 inches	0	0	0	0
(8) Annual fee for each general permit authorization for oil and gas exploration and development⁷	250	390	-- ⁸	140
(9) Annual fee for seafood processors covered under a general permit or within three nautical miles of the Pribilof Islands⁷	250	390	190	140
(10) One-time fee for contained water				
(A) Hydrocarbon-contaminated water isolated from the environment in a manmade container or a lined impoundment	-- ⁸	300	-- ⁸	-- ⁸

	Unexpired facility authorization issued before January 17, 2002	Discharge to surface water	Discharge to land or groundwater	Facility not in operation ²
(B) Chlorinated swimming pool water	-- ⁸	300	-- ⁸	-- ⁸
(11) Annual fee for brine reject discharge or filter backwash discharge from water treatment⁷	250	390	230	140

Notes to Table E:

¹Each fee amount is in dollars.

²The fee is \$0 for facilities that are not in operation and that were authorized before January 17, 2002.

³If the domestic wastewater system is a waste stabilization pond, a one-time fee of \$100 will be assessed for each authorization, regardless of the size of the discharge, if the waste stabilization pond is

(A) not designed for a routine discharge to surface water; and

(B) permitted under a general permit.

⁴ If the applicant is a business with fewer than 20 employees, the fee will be reduced by a travel cost of \$80; this deduction does not apply to a facility that is not in operation.

⁵ The fee for a facility authorization issued before January 17, 2002 is \$150, if the discharge is to land or groundwater.

⁶ The fee for a facility not in operation is \$80, if the discharge is to land or groundwater.

⁷ If the applicant is a business with fewer than 20 employees, the fee will be reduced by a travel cost of \$40; this deduction does not apply to a facility that is not in operation.

⁸ The permit fee in 18 AAC 72.959 applies.

(b) For one-time fees, an applicant for a permit or authorization shall pay the fee for the permit or authorization upon application. For annual fees, an applicant for or recipient of a permit or authorization shall pay the fee for the permit or authorization upon application, and annually afterwards within 60 days after issuance of the billing.

(c) A fee required under (a) of this section is not refundable.

(d) If an authorization to operate under a general permit is transferred from an existing owner or operator to a new owner or operator, the new owner or operator shall pay the applicable fees described in (a) of this section.

(e) An owner or operator may request in writing to terminate an existing authorization to operate under a general permit if a discharge is not occurring. If an authorization is terminated at the request of the owner or operator, the owner or operator must file a new application, and pay a new application fee for a new authorization before resuming the wastewater discharge.

(f) To be considered, for purposes of a fee required under (a) of this section, a facility not in operation, the facility

(1) must maintain a current authorization under the general permit;

(2) may not discharge during the calendar year;

(3) must submit, on a form provided by the department, a certificate of intent not to operate during the calendar year; and

(4) before resuming operation during the calendar year, must notify the department in writing at least 30 days before the intended operation, and must submit the balance of any fees due at that time. (Eff. 1/17/2002, Register 161)

Authority:	AS 37.10.052	AS 46.03.050	AS 46.03.110
	AS 44.46.020	AS 46.03.090	AS 46.03.710
	AS 44.46.025	AS 46.03.100	AS 46.03.720
	AS 46.03.020		

18 AAC 72.957. Individual permit fees. (a) An applicant must pay the appropriate fee as listed in Table F of this subsection for a permit issued under 18 AAC 72.215 or 18 AAC 72.500, or for certification of a permit required by 33 U.S.C. 1341 (Clean Water Act, sec. 401):

TABLE F. INDIVIDUAL PERMIT FEES ¹

	Unexpired permit issued before January 17, 2002	Discharge to surface water, groundwater, or land	Facility not in operation²
(1) Annual fee for a domestic wastewater system with a daily peak capacity measurement, in gpd, of			
(A) 0-1,500	-- ³	230	-- ³
(B) 1,501-15,000 ⁴	430	830	400
(C) 15,001 –100,000 ⁵	860	1,300	440
(D) 100,001 – 250,000 ⁵	900	1,410	510
(E) 250,001 and over ⁵	940	1,560	620
(2) One-time fee for review of a permit related to a bridge or causeway regulated by the United States Coast Guard under 33 U.S.C. 401 and 33 U.S.C. 525-534	-- ³	110	-- ³
(3) Annual fee for permit renewal for an agricultural chemical production plant⁶	2,620	4,300	1,680
(4) One time fee for certification under 33 U.S.C. 1341 of a “dredge-or-fill” permit issued under 33 U.S.C. 1344 (Clean Water Act, sec 404), for a			
(A) waiver of certification under 33 U.S.C. 1341	0	0	0
(B) project requiring staff time of less than three hours	-- ³	100	-- ³
(C) project requiring staff time of 3-15 hours	-- ³	320	-- ³

	Unexpired permit issued before January 17, 2002	Discharge to surface water, groundwater, or land	Facility not in operation ²
(D) project requiring staff time of 16-30 hours	-- ³	770	-- ³
(E) project requiring staff time of more than 30 hours	-- ³	2,050	-- ³
(5) One time fee for a hydroelectric project review	-- ³	2,140	-- ³
(6) Annual fee for mining activities			
(A) Permit renewals for hard rock mineral mining with			
(i) chemical concentration processes ⁶	2,620	4,300	1,680
(ii) physical concentration process ⁵	1,060	2,080	1,020
(B) Mechanical placer mining not covered under a general permit ⁴	460	820	360
(C) Mineral mining using a suction dredge with a nozzle greater than			
(i) 10 inches ⁴	460	820	360
(ii) four inches and less than or equal to 10 inches, and not covered under a general permit ⁴	270	560	290
(D) Annual fee for permit renewal for coal mining and preparation ⁶	2,620	4,300	1,680
(7) Annual fee for oil-and-gas activities			
(A) Annual fee for permit renewal for refining ⁶	2,620	4,300	1,680
(B) Annual fee for permit renewal for ballast water treatment ⁶	2,620	4,300	1,680

	Unexpired permit issued before January 17, 2002	Discharge to surface water, groundwater, or land	Facility not in operation ²
(C) Annual fee for seawater treatment ⁴	460	820	360
(8) Annual fee for a power generation cooling water discharge by a utility⁴	460	820	360
(9) Annual fee for seafood processing that is not covered under a general permit⁶	2,620	3,430	810
(10) Annual fee for a brine reject discharge or filter backwash discharge from water treatment⁴	460	820	360

Notes to Table F:

¹Each fee amount is in dollars

²The fee is \$0 for facilities that are not in operation and that were authorized before January 17, 2002.

³The permit fee in 18 AAC 72.959 applies.

⁴If the applicant is a business with fewer than 20 employees, the fee will be reduced by a travel cost of \$80; this deduction does not apply to a facility that is not in operation.

⁵If the applicant is a business with fewer than 20 employees, the fee will be reduced by a travel cost of \$160; this deduction does not apply to a facility that is not in operation.

⁶If the applicant is a business with fewer than 20 employees, the fee will be reduced by a travel cost of \$390; this deduction does not apply to a facility that is not in operation.

(b) For one-time fees, the permittee shall pay the fee within 60 days after issuance of the billing. For annual fees, fees will be billed annually and must be paid within 60 days after issuance of the billing.

(c) A fee required under (a) of this section is not refundable.

(d) If a permit is transferred from an existing owner or operator to a new owner or operator, the new owner or operator shall pay the applicable fees described in (a) of this section.

(e) An owner or operator may request in writing to terminate an existing permit if a discharge is not occurring. Before the owner or operator resumes discharging wastewater, the owner or operator must submit a new application and pay a new application fee for a new permit.

(f) To be considered, for purposes of a fee required under (a) of this section, a facility not in operation, the facility

(1) must maintain a current permit;

(2) may not discharge during the calendar year;

(3) must submit, on a form provided by the department, a certificate of intent not to operate during the calendar year; and

(4) before resuming operation during the calendar year, must notify the department in writing at least 30 days before the intended operation, and must submit the balance of any fees due at that time. (Eff. 1/17/2002, Register 161)

Authority:	AS 37.10.052	AS 46.03.050	AS 46.03.110
	AS 44.46.020	AS 46.03.090	AS 46.03.710
	AS 44.46.025	AS 46.03.100	AS 46.03.720
	AS 46.03.020		

18 AAC 72.959. Hourly and negotiated fees. (a) The department will apply a permit fee described in (b) of this section to

(1) a permit for a discharge that is not listed or for which a fee is not listed in 18 AAC 72.956 or 18 AAC 72.957; and

(2) a new facility or an expansion, modification, or other change in a permitted facility's process or operation

(A) for agricultural chemical production;

(B) for mining, including

(i) hard rock;

- (ii) coal;
- (iii) heap leach extraction; or
- (iv) open pit;

(C) for ballast water treatment;

(D) for oil and gas refining;

(E) for seafood processing; or

(F) that is reasonably expected to result in an increase in discharge or otherwise cause detrimental impacts to public health and the environment.

(b) For a wastewater discharge permit from a facility or activity that is described in (a) of this section, the department

(1) will assess a fee based on direct department costs, including

(A) salaries and benefits of department employees directly involved in providing the standard designated regulatory service; and

(B) goods and third-party services, including travel if the business has more than 20 employees; or

(2) may, if the applicant requests, agree to a negotiated fee.

(b) The permittee shall pay the fee under this section within 60 days after the department mails an invoice. (Eff. 1/17/2002, Register 161)

Authority:	AS 37.10.052	AS 46.03.020	AS 46.03.110
	AS 37.10.054	AS 46.03.050	AS 46.03.710
	AS 44.46.020	AS 46.03.090	AS 46.03.720
	AS 44.46.025	AS 46.03.100	

18 AAC 72.960. Appeals. (a) After receiving the department's decision concerning plans submitted for approval under this chapter, the applicant or other person adversely affected by the plan review decision may request an informal review of the decision under 18 AAC 15.185 and may request an adjudicatory hearing under 18 AAC 15.195 – 18 AAC 15.340

(b) Repealed 7/11/2002.

(c) Repealed 7/11/2002. (Eff. 6/30/90, Register 114; am 4/1/99, Register 149; am 7/11/2002, Register 163)

Authority:	AS 44.46.020	AS 46.03.050	AS 46.03.090
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AS 46.03.020

18 AAC 72.961. Fee determination or computation appeals. A person subject to a fee under this chapter who disputes a fee determination or computation of fees may request a fee review under 18 AAC 15.190. (Eff. 11/10/94, Register 132; am 4/1/99, Register 149; am 7/11/2002, Register 163)

Authority:	AS 44.46.020	AS 46.03.050	AS 46.03.710
	AS 44.46.025	AS 46.03.090	AS 46.03.720
	AS 46.03.020		

18 AAC 72.990. Definitions. Unless the context indicates otherwise, in this chapter

(1) "above-ground storage tank" means a tank system with 100 percent of its volume above ground;

(2) "alternate onsite system" means a method of onsite treatment and disposal other than a conventional onsite system;

(3) "alternate soil absorption system" means a method of soil absorption treatment and disposal other than a conventional soil absorption system; "alternate soil absorption system" does not include holding tanks or nonwater-carried disposal methods such as composting, incineration, or privies;

(4) "approved" and "approval" mean approved in writing by, or the written approval of, the department;

(5) "as-built drawings" means the original plans and specifications prepared for construction and approved by the department, corrected to reflect how a facility was actually constructed or installed;

(6) "bed" or "bed system" means a soil absorption system that is a level excavation, wider than three feet, that contains at least one line of distribution piping, and the bottom area of which is the infiltrative surface;

(7) "biochemical oxygen demand" means the amount, in milligrams per liter, of oxygen used in the biochemical oxidation of organic matter in five days at 20° C;

(8) "cesspool" means a subsurface pit that receives untreated sewage;

(9) "cleanout" means an appurtenance on a community sewer line designed to provide access for the purpose of removing deposited or accumulated materials;

(10) "collection and pumping system" or "collection system" means a system of pumps, conduits, or both that transports domestic wastewater from the facility where that wastewater is generated to a domestic wastewater treatment works; "collection and pumping system" or "collection system"

(A) includes

(i) gravity, pressure, and vacuum sewers, including associated appurtenances such as manholes and cleanouts;

(ii) pump or collection stations; and

(iii) a collector sewer, regardless of ownership of the land on which it is installed; and

(B) does not include a private sewer line;

(11) "collector sewer" means a sewer line used as a common receiver of sewage from more than one service line;

(12) "commissioner" means the commissioner of the Department of Environmental Conservation;

(13) "community sewer line" means that portion of a sewerage serving

(A) one or more multi-family dwellings;

(B) a mobile home park, a trailer park, or a recreational vehicle park;

(C) two or more

(i) single-family homes or duplexes;

(ii) commercial establishments;

(iii) industrial establishments; or

(iv) institutions; or

(D) a combination of two or more of the structures listed in (C)(i)-(iv) of this paragraph;

(14) "community soil absorption system"

(A) means a soil absorption system serving

(i) one or more multi-family dwellings;

(ii) a mobile home park, a trailer park, or a recreational vehicle park;

(iii) two or more single-family homes, duplexes, commercial establishments, industrial establishments, or institutions; or

(iv) a combination of two or more of the structures listed in (iii) of this subparagraph; and

(B) does not include a system serving a small commercial facility;

(15) "conventional onsite system" means a system that treats domestic wastewater exclusively, that meets the requirements of 18 AAC 72.035 and 18 AAC 72.260, and that uses a septic tank followed by a discharge into a conventional soil absorption system in undisturbed native soil, with or without a sand liner; "conventional onsite system"

(A) includes a properly pressurized sewer line used to convey sewage from the home into a septic tank or from a septic tank into a gravity distribution soil absorption system; and

(B) does not include

(i) an intermittent sand filter design; or

(ii) an elevated mound system design;

(16) "conventional soil absorption system" means an onsite wastewater treatment and disposal system that

(A) is of typical trench, bed, or seepage pit design;

(B) is vertically located so that the bottom of the distribution rock is at or below existing grade;

(C) uses natural subsurface undisturbed soils, with or without a sand liner, for the treatment media; and

(D) utilizes non-pressurized effluent distribution;

(17) "deep trench" means a soil absorption system that uses a trench, the vertical walls of which form the infiltrative surface area;

(18) "department" means the Department of Environmental Conservation;

(19) "design criteria" means information and numerical data such as rates, loadings, and other parameters upon which a specific facility design is based; "design criteria" includes

(A) engineering guidelines that specify construction details and materials;
and

(B) objectives, results, or limits that a facility, structure, or process must meet in the performance of its intended function;

(20) "director" means

(A) for matters dealing with domestic wastewater, the director of the department's division assigned to environmental health; or

(B) for matters dealing with nondomestic wastewater, the director of the department's division assigned to air and water quality;

(21) "disinfect" means to treat by means of a chemical, physical, or other process, such as chlorination, ozonation, application of ultraviolet light, or sterilization, designed to eliminate pathogenic organisms, and producing an effluent with the following characteristics:

(A) an arithmetic mean of the values for a minimum of five effluent samples collected in 30 consecutive days that does not exceed 200 fecal coliform per 100 milliliters; and

(B) an arithmetic mean of the values for effluent samples collected in seven consecutive days that does not exceed 400 fecal coliform per 100 milliliters;

(22) "disposal system" means a system, the sole function of which is to provide a means of final disposal of domestic wastewater to the environment;

(23) "domestic wastewater" means waterborne human wastes or graywater derived from dwellings, commercial buildings, institutions, or similar structures; "domestic wastewater" includes the contents of individual removable containers used to collect and temporarily store human wastes; "domestic wastewater" does not include

(A) liquid or solid material removed from a septic tank, cesspool, or similar treatment works, if those facilities receive nondomestic or industrial wastewater; or

(B) grease removed from a grease trap at a restaurant.

(24) "domestic wastewater disposal system" means a device, structure, or formation used to dilute, dispose, or discharge domestic wastewater; "domestic wastewater disposal system" includes injection wells, soil absorption systems, pits, crevices, sinkholes, depressions, outfalls, percolating stabilization ponds, land irrigation systems, sewers, and treatment works;

(25) "domestic wastewater treatment works" means a plant, device, structure, or other works designed to treat, neutralize, or stabilize domestic wastewater or sludges; "domestic wastewater treatment works" includes a septic tank, package plant, stabilization pond, soil absorption system, activated sludge treatment plant, trickling filter, and rotating biological

contactor plant;

(26) "drain" means the line that is the lowest line in or beneath a building and that receives and carries the sewage to the service line; however, a line serving separate buildings or structures, even though it runs beneath a building, is considered to be a service line;

(27) "duplex" means a single structure designed to house two single-family dwelling units;

(28) "emergency repair" means a system repair or alteration that is necessary

(A) to protect public health; or

(B) for the system to perform the major functions for which the system was designed;

(29) "engineering plans" means a set of plans approved and sealed by a registered engineer;

(30) "EPA" means the United States Environmental Protection Agency;

(31) "equalize" means to dampen daily fluctuations of the flow, quality, or amount of wastewater, in order to distribute surges over a period of time;

(32) "facility" means a building or structure;

(33) "geotechnical study" means a report or study analyzing sufficient subsurface information necessary to evaluate the effect from permafrost layers on the structural integrity and operational performance of the proposed wastewater system;

(34) "gpd" means gallons per day;

(35) "graywater" means wastewater

(A) from a laundry, kitchen, sink, shower, bath, or other domestic source; and

(B) that does not contain excrement, urine, or combined stormwater;

(36) "groundwater" means the subsurface water permanently or seasonally occupying the zone in which the voids in the rock or soil are filled with water at a pressure greater than atmospheric;

(37) "holding tank" means a watertight vessel or tank for the temporary storage of wastewater, urine, or excrement; "holding tank" includes a vault privy; "holding tank" does not include a pit privy;

(38) "land surface disposal system" means a system that disposes of treated wastewater onto the surface of the land in areas suitable for that purpose;

(39) "marine outfall" means a discharge pipe used for the final disposal of wastewater extending from a wastewater treatment works to the point of discharge in marine waters, including equipment or appurtenances used for diffusing treated effluent to the marine environment;

(40) "multi-family dwelling" means a dwelling unit housing more than two single-family residences;

(41) "nondomestic wastewater" means liquid or water-carried wastes other than domestic wastewater; "nondomestic wastewater" includes wastes resulting from

(A) a manufacturing, food processing, or production enterprise;

(B) an industrial establishment;

(C) the development of natural resources;

(D) the construction of a manufacturing, production, or industrial facility;

and

(E) stormwater runoff;

(42) "nondomestic wastewater disposal system" means a device or structure designed to dilute, dispose, or discharge nondomestic wastewater;

(43) "nondomestic wastewater treatment works" means a plant, device, structure, or other works designed to treat, neutralize, or stabilize nondomestic wastewater or sludges;

(44) "nonpercolating stabilization pond" means a stabilization pond that

(A) is designed to contain wastewater; and

(B) prevents subsurface leakage at a rate greater than 500 gallons per acre per day at a water depth of six feet;

(45) "observed percolation rate," "observed soil texture," and "observed soil type" mean the percolation rate, soil texture, or soil type as observed by a person who may install a domestic wastewater treatment and disposal system as described in 18 AAC 72.015;

(46) "package plant" means an alternate onsite wastewater treatment and disposal system that is a transportable modular treatment system for domestic wastewater and that serves less than 25 persons; "package plant" does not include septic or holding tanks;

(47) "percolating stabilization pond" means a stabilization pond designed to

contain wastewater and to allow subsurface leakage at a rate greater than 500 gallons per acre per day at a water depth of six feet;

(48) "pit privy"

(A) means a structure that

(i) receives urine and excrement that is not waterborne; and

(ii) is the final disposal site and not a temporary storage facility;

and

(B) does not include a vault privy;

(49) "potable water source" means a source of water, intake works, collection system, treatment works, storage facility, or distribution system from which water is available for human consumption;

(50) "primary treatment" means wastewater treatment that

(A) removes substantially all floating and settleable solids; or

(B) uses fine screens with 0.04-inch or smaller openings;

(51) "private sewer line" means a pipeline or conduit carrying domestic wastewater from a single-family home or duplex, a single industrial establishment, a single institution, or a single commercial establishment to a treatment system, disposal system, or community sewer; "private sewer line" does not include the pipeline or conduit carrying domestic wastewater from a trailer park, a mobile home park, or a multi-family dwelling;

(52) "private water system" has the meaning given in 18 AAC 80.1990;

(53) "public water system" has the meaning given in 18 AAC 80.1990;

(54) "record documents" means record drawings and specifications; "record documents" includes construction submittals, photographs, diaries, daily reports, and test reports;

(55) "record drawings" means the original plans prepared for construction and department approval, revised to reflect how the system was constructed or installed;

(56) "registered engineer" means a professional engineer registered to practice in this state under AS 08.48;

(57) "routine maintenance" means activity normally required to maintain the system components in good working order;

(58) "sealed" means prepared by a registered engineer or a person under that engineer's direct supervision, and bearing the signature and seal of that engineer as required by AS 08.48.221 and 12 AAC 36.185;

(59) "secondary treatment" means a method of removal of dissolved and colloidal materials that produces an effluent with the following characteristics:

(A) for the five-day measure of biochemical oxygen demand from a source other than a stabilization pond,

(i) an arithmetic mean of the values for effluent samples collected in 30 consecutive days that does not exceed 30 milligrams per liter;

(ii) an arithmetic mean of the values for effluent samples collected in seven consecutive days that does not exceed 45 milligrams per liter; and

(iii) an arithmetic mean of the values for effluent samples collected in a 24-hour period that does not exceed 60 milligrams per liter;

(B) for the five-day measure of biochemical oxygen demand at a stabilization pond,

(i) an arithmetic mean of the values for effluent samples collected in 30 consecutive days that does not exceed 45 milligrams per liter and a percent removal that is not less than 65 percent by weight; and

(ii) an arithmetic mean of the values for effluent samples collected in seven consecutive days that does not exceed 65 milligrams per liter;

(C) for the measure of suspended solids from a source other than a stabilization pond,

(i) an arithmetic mean of the values for effluent samples collected in 30 consecutive days that does not exceed 30 milligrams per liter;

(ii) an arithmetic mean of the values for effluent samples collected in seven consecutive days that does not exceed 45 milligrams per liter; and

(iii) an arithmetic mean of the values for effluent samples collected in a 24-hour period that does not exceed 60 milligrams per liter; and

(D) for the measure of suspended solids at a stabilization pond, an arithmetic mean of the values for effluent samples collected in 30 consecutive days that does not exceed 70 milligrams per liter; and

(E) for the measure of effluent pH, between 6.0 and 9.0 unless

(i) inorganic chemicals are not added to the waste stream as part of the treatment process; and

(ii) contributions from industrial sources do not cause the pH of the effluent to be less than 6.0 or greater than 9.0;

(60) "seepage pit" means an underground pit that

(A) extends into porous strata;

(B) is lined with open-jointed stone, concrete block, or similar walls; and

(C) introduces into the ground, by seepage, the partly treated effluent from a wastewater system;

(61) "sensitive receiving environment" means

(A) fresh or marine water that supports anadromous fish;

(B) fresh or marine water used for drinking or food processing;

(C) water susceptible to eutrophication;

(D) a stream with low or intermittent flow;

(E) tundra; or

(F) land that permits exposure of wastewater to the public;

(62) "septage" means liquid or solid material removed from a septic tank, cesspool, portable toilet, Type III marine sanitation device, or similar domestic wastewater treatment works that receives only domestic wastewater;

(63) "septic tank" means a watertight, covered receptacle designed and built to

(A) receive domestic wastewater;

(B) separate floating and settling solids from the liquid;

(C) anaerobically digest organic matter;

(D) store digested solids through a period of detention; and

(E) allow clarified liquids to discharge for final disposal;

(64) "service line" means a pipeline or conduit that

(A) runs outside a building foundation; and

(B) carries sewage to a collector sewer, wastewater treatment works, or wastewater disposal system;

(65) "sewage" means domestic or nondomestic wastewater;

(66) "sewer" or "sewer line" means a pipeline, conduit, or sewerage line that carries domestic or nondomestic wastewater; "sewer" or "sewer line" does not include a private sewer line;

(67) "sewerage" means sewers, sewage pumping stations, force mains, and related structures, devices, and appliances used to carry domestic or nondomestic wastewater to a point of final treatment or disposal;

(68) "shallow trench" means a soil absorption system that

(A) does not exceed five feet in width;

(B) contains a single line of perforated pipe; and

(C) uses the bottom area for absorption;

(69) "slough" means a swamp, bog, or marsh, especially one that is part of an inlet or backwater;

(70) "sludge" means a solid, semisolid, or liquid waste that contains at least five percent solids by weight, and that is generated at a municipal, commercial, or industrial wastewater treatment plant, a septic tank, a water supply treatment plant, or an air pollution control facility; "sludge" includes similar material accumulated in and removed from a storage tank or surface impoundment containing oil, industrial liquid waste, acid, chemicals, or another similar substance;

(71) "small commercial facility" means a single commercial building with an expected peak design flow of 500 gpd or less;

(72) "soil absorption system" means a surface or subsurface system using soil for the treatment and disposal of effluent from a domestic wastewater treatment works; "soil absorption system" includes a filtering field, leaching field, seepage bed, or seepage pit, but does not include a cesspool;

(73) "stabilization pond" means a shallow body of liquid or sludge contained in an earthen basin and designed to treat wastewater or septage sludge;

(74) "standard absorption trench" means a soil absorption trench with a distribution medium that extends at least two inches above and at least 10 inches below the invert of the distribution piping, with the absorption area calculated using the bottom area only;

(75) "treatment works" means the central portion of a wastewater facility that contains the various treatment processes, exclusive of the collection system;

(76) "treatment works with individual marine outfall" means a treatment system located on one lot, or shared by adjacent lots, from which effluent is discharged through a single outfall extending to marine water;

(77) "vacuum sewer" means a collection system using a vacuum and high scour velocities to convey wastewater;

(78) "vault privy" means a holding tank with a seat or seats, or other appurtenances attached, that allows for excretion of human wastes directly into the tank;

(79) "wastewater" means domestic or nondomestic wastewater;

(80) "water table" means the upper surface of a zone of saturated soil, including normal seasonal fluctuations, but excluding fluctuations caused by heavy rainfall or rapid snow-melt; the water table is indicated by the level at which water stands in a well that

(A) is open along its length; and

(B) penetrates the surficial deposits just deeply enough to encounter standing water in the bottom.

(81) "daily peak capacity" means the maximum daily flow of wastewater measured in gpd, that a treatment system is designed to process;

(82) "hydroelectric project" means a project that generates electricity by converting the energy of running water;

(83) "standard designated regulatory services" has the meaning given in AS 37.10.058;

(84) "stormwater pollution prevention plan" means a facility's plan to prevent or control the discharge of pollutants in stormwater runoff, as required by a permit required under 33 U.S.C. 1342(p) (Clean Water Act, Sec. 402(p));

(85) "toxic substance" has the meaning given in 18 AAC 70.990. (Eff. 4/1/99, Register 149; am 3/25/2001, Register 157; am 1/17/02, Register 161)

Authority:	AS 44.46.020	AS 46.03.080	AS 46.03.110
	AS 46.03.020	AS 46.03.090	AS 46.03.710
	AS 46.03.050	AS 46.03.100	AS 46.03.720
	AS 46.03.070		

Editor's Note: Statutory definitions that apply to this chapter are found at AS 46.03.900.